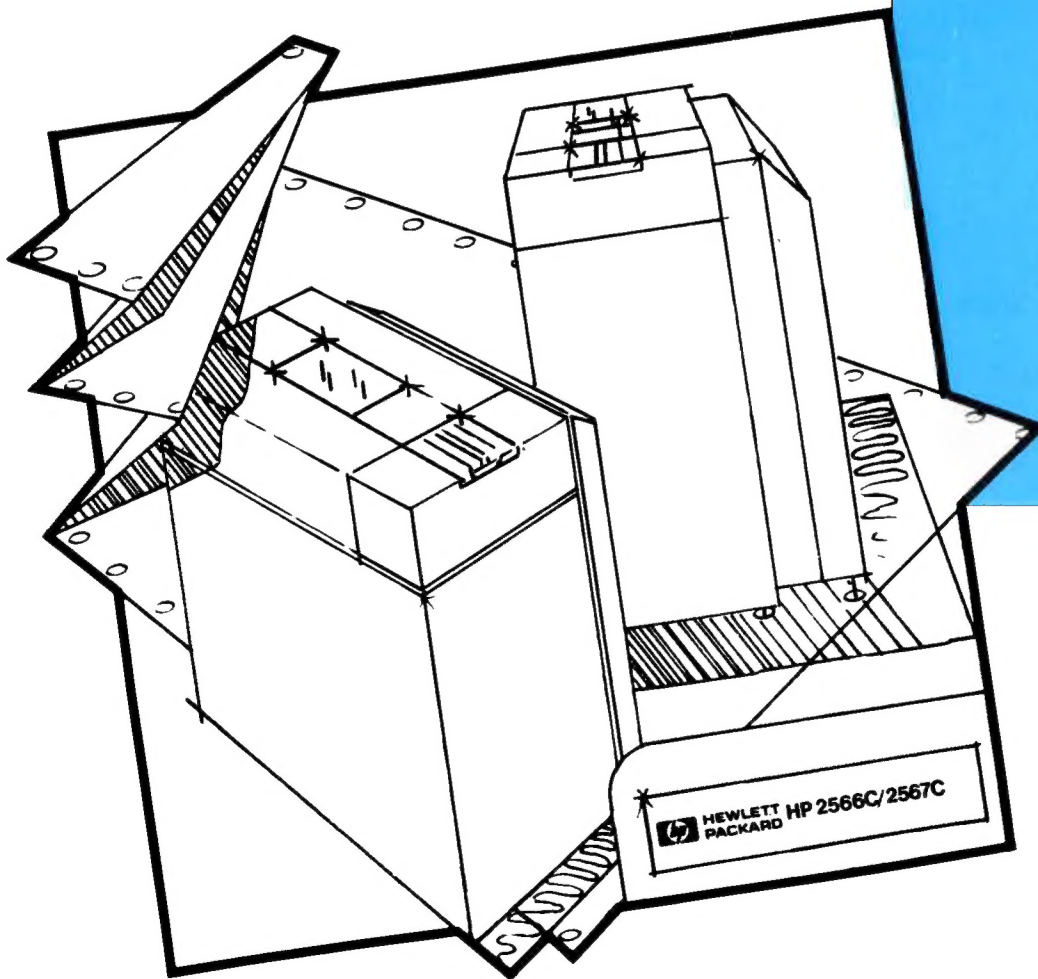


HP 2566C/HP 2567C Operator's Manual



HP2566C/HP2567C OPERATORS MANUAL



HP Part No. 02566-90990
Printed in USA April 1990

1st edition

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PUBLICATION HISTORY

Changes in text to document updates subsequent to the initial release are supplied in new editions of the manual. The printing history (edition) of the manual is shown on the title page. The last edition date itemized reflects the machine configuration documented in the manual.

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Warning: This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radion communications. It has been tested and found to comply with the limits for Class A computing devices pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

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What Is In This Manual

The information in this manual is divided into the following chapters:

Chapter 1: General Information

This chapter provides a list of related documentation that may be useful to you. This is followed by a functional description of the HP2566C/HP2567C printer, a list of options and supplies, and a word about service and operator safety.

Chapter 2: Getting the Most From Your Printer and Paper

To determine the best location for your printer and what kind of paper to use, read Chapter 2.

Chapter 3: Preparing the Printer for Operation

Chapter 3 helps you begin using the printer. It explains how to load the ribbon and paper, adjust your printer for different sizes and thicknesses of paper, and set Top of Form.

Chapter 4: Setting-Up the powered paper stacker

Once your paper is loaded correctly in the printer, follow the instructions in this chapter to set-up your powered paper stacker for optimum paper stacking performance.

Chapter 5: Configuring Printer Features

This chapter explains how to program your printer to perform various tasks. It also describes how to set the HP-IB interface address and run sub-tests.

Chapter 6: Using the Printer

Chapter 6 discusses the use of the Operator Control Panel and explains each control key in detail. After this there are sections on power fail recovery and reset, Vertical Forms Control (VFC), and optimizing print quality.

Chapter 7: In Case Of Difficulty

This chapter tells you what to do in case of printer fault conditions. All printer errors are explained; even those that do not show up in the display window.

Appendix A: Printer Specifications

Appendix A gives detailed printer specifications, including physical characteristics, environmental requirements, electrical hook-up, power consumption, and performance data.

Appendix B: Paper Specifications

This appendix describes paper requirements and provides information on specialty forms.

Appendix C: Ribbon Specifications

This section lists specifications for the printer ribbon.

Index	Use the index to locate primary sources of information.
Self-Test Printout	This is a simulated copy of a standard self-test run on an HP2566C/HP2567C printer. You might find it useful for comparison purposes.
User Comment Sheet	A postage-paid form is available for you to give us feedback about this manual. Please use it to relay any comments or suggestions you may have for us.
Sales and Service Offices	In the back of this manual there is a listing of all of Hewlett-Packard's Sales and Service offices throughout the world. If you have any questions or need information, contact the nearest office.

GENERAL INFORMATION

Introduction

This manual contains information necessary to operate the HP2566C/HP2567C line printer. Read it before using your printer so that you will be familiar with all its capabilities and features.

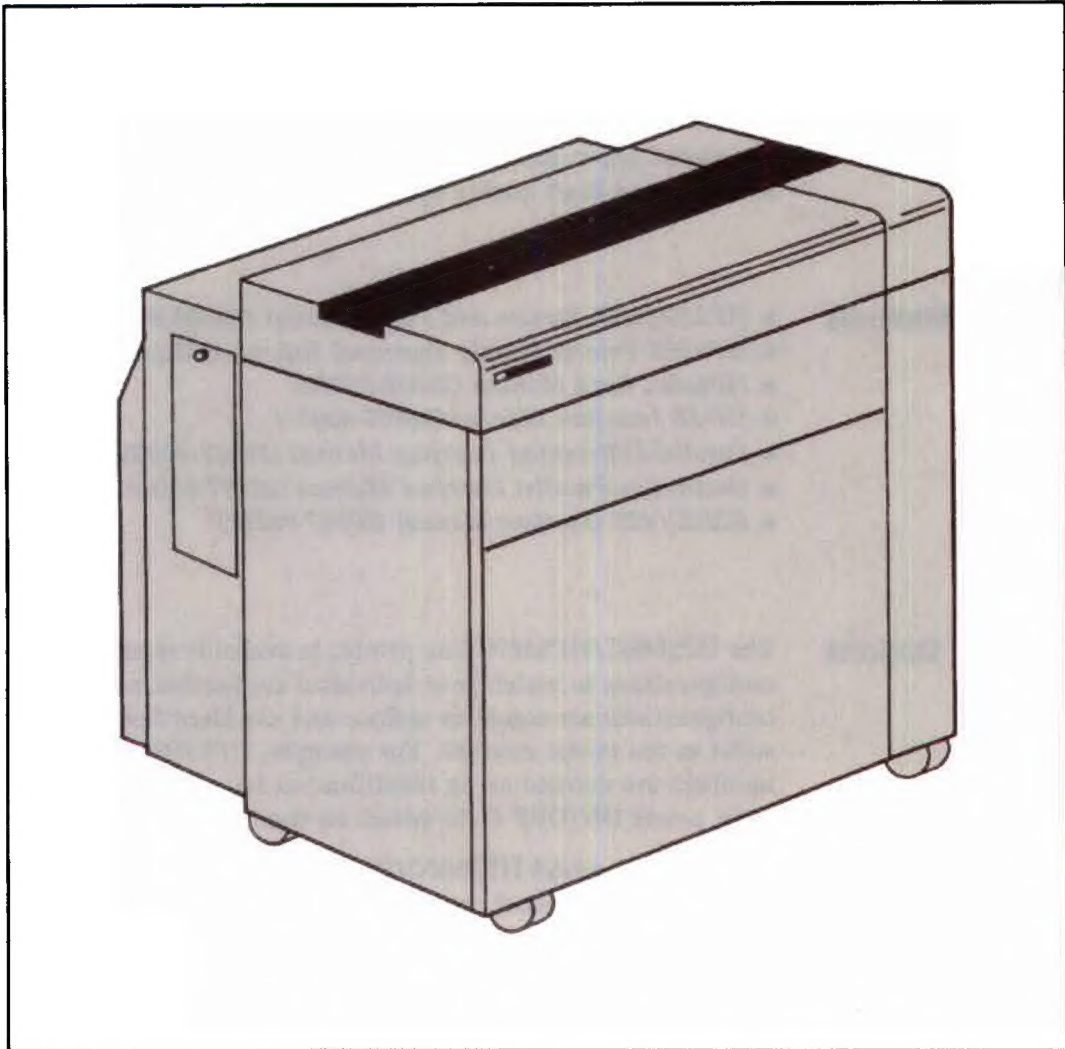


Figure 1-1. HP2566C/HP2567C Printer with powered paper stacker

Product Description

The HP2566C/HP2567C printer is a highly reliable, heavy-duty line printer designed for use in many printing applications. The HP2566C model prints 1200 upper case draft lines-per-minute; the HP2567C model prints 1600 upper case draft lines-per-minute. These printers have several attractive features, including:

- Multiple character sets requiring no mechanical font change
- Bar code printing capability
- 16-channel vertical forms control (VFC)
- Several print pitches (10, 12, 13.3, 15 and 16.7 characters-per-inch)
- Raster graphics capability (standard and high density selectable)
- Paper jam detection
- Easy forms alignment
- Interfacing flexibility
- Restart/recovery ability following printer interrupts and power failure (Hewlett-Packard ciper protocol only)
- powered paper stacker to stack printer paper
- High speed draft quality character set

Related Manuals

- *HP2566/67B Service and Parts Manual (02566-90915)*
- *HP256X Printer Family Technical Reference Manual (02564-90905)*
- *HPLabel Card Manual (26062-90902)*
- *HP-IB Interface Manual (26067-90901)*
- *Parallel-Differential Interface Manual (26067-90905)*
- *Centronics Parallel Interface Manual (26067-90906)*
- *RS232/422 Interface Manual (26067-90921)*

Options

The HP2566C/HP2567C line printer is available in several configurations to match your individual application needs. These configurations are stated as options and are identified by a three digit suffix to the model number. For example, HP2566C #001. The option numbers are marked on an identification tag which is located near the main power ON/OFF (1/0) switch on the back of the printer.

The standard model HP2566C/HP2567C printer includes a 16-channel Vertical Forms Control, normal and compressed printing features, raster graphics capabilities, paper jam detection, a Roman8 symbol set (Standard ASCII plus Roman Extension), compressed and double-size characters, and high speed draft characters.

It is configured for 120 VAC, 50/60 Hz. operation, and comes equipped with a power cord and one ribbon.

The following tables show the available options for the HP2566C/HP2567C printer:

Table 1-1. Character Sets

Options #	Description
001	Line Draw, Math, and Block character sets
002	Katakana8 character set (replaces Roman8 standard character set)
004	High Density Roman8 character set
005	High Density Italics Roman8 character set
006	High Density Katakana8 character set
008	Bar Code Printing Capability
009	Adds 12, 13.3 cpi with Roman8 character set
012	Adds 12, 15 cpi with Roman8 character set (Line Draw, Math and Block character sets)
013	Adds 13.3, 15 cpi with Roman8 character set
026	Cyrillic standard density (ECMA 113/86 character set)
027	Cyrillic high density (ECMA 113/86 character set)
028	Cyrillic standard density (ECMA 113/88 character set)
029	Cyrillic high density (ECMA 113/88 character set)
030	Arabic8, Line draw character set
031	Arabic8, (high density) character set
032	Turkish8, ASCII, Line draw character set
033	Turkish8, (high density) character set
034	Greek8, ASCII, Line draw character set
035	Greek8, (high density) character set
036	Hebrew8, ASCII, Line draw character set
037	Hebrew8, (high density) character set
038	Hebrew7, Line draw character set
039	Hebrew7, (high density) character set
043	East European standard density (ECMA 94/Latin2 character set)
044	East European high density (ECMA 94/Latin2 character set)

Note

The standard printer will accept one additional normal density character set ROM and three additional high density character set ROM's. Contact your Hewlett-Packard Sales or Service Representative for details.

Table 1-2. Power Supplies

Option #	Description
015	220 VAC, 50/60 Hz Operation
016	100 VAC, 50/60 Hz Operation
017	240 VAC, 50/60 Hz Operation

Table 1-3. Interface Subsystems

Option #	Description
046	HP-IB interface (standard), 4 metre cable included
049	RS232C interface subsystem
050	RS422A interface subsystem
053	Centronics Parallel interface subsystem
054	Dataproducts Long-Line interface subsystem

Table 1-4. Convenience Options

Option #	Description
024	HP Label Card graphics enabling the printer to print varying sizes of characters, graphics, bar codes and lines using QMS(R)* Magnum(R)* language.
060	Delete powered paper stacker
715	Service Documentation (02566-90915)

*QMS and MAGNUM are registered trademarks of QMS, Inc.

Supplies and Accessories

The supplies and accessories recommended for use with your printer are listed below. These are available from Hewlett-Packard's Direct Marketing Division (DMK) with direct phone service available to Hewlett-Packard customers within the continental United States. Orders may be taken from 9 AM to 5 PM in all United State time zones.

To place an order call:

TOLL FREE - 800-538-8787

IN CALIFORNIA - (408) 738-4133 (Direct or Collect)

Outside the United States, however, orders may be placed with the local Hewlett-Packard Sales and Service office listed in the back of this manual.

Ribbon One replacement ribbon (towel-type), part number 9282-0545. (See Appendix C, Ribbon Specifications.)

Paper

Table 1-5. Recommended Printer Paper

Part #	Description	Quantity
92157A	One-part, white, 9.5 x 8.5 in. (241 x 216 mm), 18 lb.	2400 sheets/box
92157B	One-part, white, 9.5 x 8.5 in. (241 x 216 mm), 15 lb., 3-hole punched	3200 sheets/box
9280-0218	One-part, green bar, 9.9 x 11 in. (251 x 279 mm), 15 lb., 80-column	3200 sheets/box
9280-0705	One-part, white, 8.5 x 7.5 in. (216 x 191 mm), 15 lb., 72 column	3200 sheets/box
9320-1515	One-part, blue bar, 14.9 x 11 in. (378 x 279 mm), 18 lb., 132-column	2400 sheets/box

See Appendix B for information on paper specifications.

Service

Hewlett-Packard offers maintenance agreements, "time and material" service, and other service agreements for the HP2566C/HP2567C printer. If you need service or have questions regarding the servicing of your printer, contact the Hewlett-Packard Sales and Service office nearest you. A list of these offices is provided at the back of this manual.

Operator Safety

Warning



For operator safety, close the top cover and printer cabinet door when the printer is powered on and during operation. Keep hands, long hair, necklaces, and articles of clothing such as long sleeves out of the printer when operating conditions exist. DO NOT attempt to perform troubleshooting or maintenance procedures beyond those described in Chapter 7.

GETTING THE MOST FROM YOUR PRINTER AND PAPER

Printer Location

The HP2566C/HP2567C printer should be located in a clean, traffic-free environment, preferably an area not subjected to excessive mechanical shocks, vibrations or wide ranges of temperature. Air conditioning is not required to ensure reliable operation of the printer; however, the environmental specifications as outlined in Appendix A should not be exceeded.

Note



Make sure the printer sits level. The output paper stack will not stack correctly if the printer does not sit evenly on the floor.

The location of your printer must provide adequate operator access to both the front and rear of the printer. The area around the printer should be kept clean and dust free so that the air used to cool the printer will not contain excessive dust particles.

If the printer must be operated in either high or low humidity, read Appendix B for ways to optimize paper handling.

Printer Installation

Hewlett-Packard provides the original installation and testing of the printer at your site. However, if you need to move the printer to a new location, follow these procedures:

Moving the Printer

1. Record printer configurations.

Before moving the printer, record key configuration values retained in memory. This will allow quick restoration in the event of a battery failure. Recording all configuration settings listed in Table 5-1 is recommended, however configuration functions 20-29 are the most critical. These could affect system performance and stability and must be verified before connecting the printer to the operating system. Refer to Chapter 5, "Configuring Printer Features" for information on configuration settings. To find out which printer configuration parameters are saved in memory when power is turned off, refer to "Power-On Parameters and Power-Fail Recovery" on page 6-11.

2. Turn the printer "OFF."

With the printer "off-line," switch the main power ON/OFF (1/0) switch located on the back of the printer to the "OFF" (0) position. Unplug the power cable from **both** the AC outlet and the printer.

3. Disconnect the interface cable.

Unplug the printer's interface cable from the rear of the printer.

4. Raise the levelers.

Turn the printer's four leveling feet counter-clockwise and raise them into the full UP position.

5. Install the shipping brackets (behind the casting).

The printer is shipped with four metal shipping lock brackets as shown in their locations in Figure 2-1. The brackets should have been removed when the printer was unpacked and saved for printer relocation. Re-install them, behind the casting, for any major relocation of the printer as they provide protection from vibration damage. New shipping brackets may be ordered through your Hewlett-Packard Service Representative. Specify two each of part numbers 02566-00231 and 02566-00236 (front and rear brackets) and four each of part numbers 3020-0004 and 3020-0025 (bolts and washers).

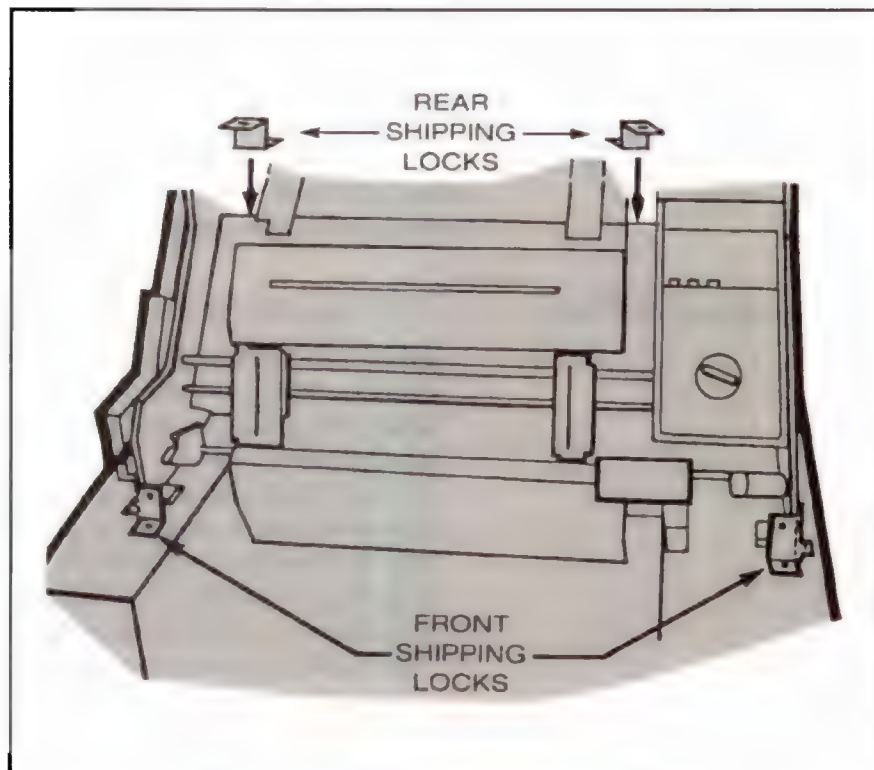


Figure 2-1. Shipping Lock Bracket Locations

Caution



Before moving the printer, make sure that the leveling feet are fully raised. Roll the printer from the side to minimize the possibility of tipping.

6. Move the printer.

Move the printer from the side to its new location. The printer is more stable when rolled in this way.

At New Location

1. Remove shipping brackets (if installed).

Refer to Figure 2-1 for locations.

2. Connect the power cord.

Connect the power cord to the AC power input jack on the back of the printer and plug the other end into the AC outlet.

3. Lower the leveler feet.

Turn the printer's leveling feet clockwise until all four wheels are just off the floor. Next, level the printer.

Note



For optimum performance of the powered paper stacker, make sure the printer sits level on the floor. The output paper stack will not stack correctly if the printer is not level.

4. Connect the interface cable.

Connect the interface cable from the computer system to the interface connector on the back of the printer. If you have an HP-IB interface, use the supplied shielded cable. Failure to use the appropriate cable could cause electrostatic discharge (ESD) problems.

5. Load the ribbon and paper.

Follow the directions starting on page 3-5 to load the ribbon and paper.

6. Switch the printer "ON."

Switch the main power ON/OFF (1/0) switch located on the back of the printer to the "ON" (1) position.

7. Verify the configuration parameters.

Verify printer configuration as recorded in step 1 of "Moving the Printer" on page 2-1.

8. Run a self-test.

Put the printer “off-line” and press the **TEST** key on the Operator Control Panel. Run the standard self-test (refer to page 5-7 for self-test information) and press the **ENTER** key. The self-test begins to print out. Compare this printout with the self-test printout at the back of this manual. (Note that the self-test in this manual is a simulated copy of an standard printout and will not be exactly like the one you printed. Yours will vary depending on which character set options are installed in your printer.) If no error numbers are flashing in the display window, and the print quality of the characters on the self-test is good, the printer is ready for operation.

Power

The HP2566C printer has a maximum power requirement of 550W; the HP2567C requires 650W. One of the following power sources must be available for operating the printer: 100, 120, 220, or 240 VAC (+5%-10%). Your printer has been shipped to match the power source specified in your order. If it becomes necessary to change to a different power source, contact your Hewlett-Packard Service Representative.

Note



Changing to a different power source is not covered under warranty or Hewlett-Packard Service Agreements.

See Appendix A or more power requirement information.

Paper Requirements

Selecting the right printer paper is one of the most important factors in obtaining good paper stacking performance. The paper that you choose needs to acclimate to your location and the type of printing you are doing. The powered paper stacker is only successful if the paper falls and folds correctly onto the paper tray. Because some variables in paper may significantly affect print quality or the way the paper handles, it is very important to understand the many aspects that can alter paper performance.

The printer uses continuous fan-fold, edge-perforated paper varying in width from 3 inches (7.6 cm) to 18 inches (45.72 cm). Although the printer accepts paper as wide as 18 inches (45.72 cm), the farthest right it can print is 15.2 inches (38.6 cm). It will handle paper weights in the range of 15 to 100 pound (57 to 380 gm/sq metre) and multi-part carbon forms up to six parts may be used, with a maximum pack thickness of .024 inches (.61 mm).

Note



Hewlett-Packard does not recommend the use of untested carbonless multi-part forms. This is due to the varying manufacturing quality and storage considerations associated with this type of paper.

If paper will be printed in humidity extremes (greater than 80% or less than 20%) it should be thoroughly tested first. Paper to be used in high humidity areas should be tested for satisfactory feeding and handling. Paper to be used in low humidity areas should be tested for static build-up to determine potential paper stacking problems.

In general, before you purchase large quantities of paper, test it for satisfactory feeding, print quality, and stacking ability. Any special application paper, such as multi-part forms, labels, etc., should also be thoroughly tested prior to volume purchase.

Note



For best paper performance, use a higher weight paper in high humidity environments.

Refer to Appendix B for additional information on paper.

Paper Storage and Handling

The performance of the printer is dependent on the condition of the paper it uses. Here are some recommendations for packaging, storing, and handling your paper.

Packaging

To avoid damage during handling, top and bottom fillers should be used in continuous paper cartons to hold the stack firmly in place. Because the physical condition of the paper affects printer reliability, correct packaging ensures that the paper remains flat and is not damaged along the edges.

Storing

Do not store cartons directly on the floor, and do not stack more than six high. Each carton should be set upright squarely on the one underneath. Placing additional weight on top of the stack of cartons can damage the paper.

**Environmental
Conditions**

Since performance is affected by environmental conditions, paper should be protected from extremes in temperature and humidity.

Paper should be stored in an environment similar to the printer's controlled environment for four days prior to use. This conditioning allows moisture content in the paper to stabilize. Your printer is intended for operation in a controlled environment where temperatures range from 50° to 122° F (10° to 50° C) and the relative humidity is 30% to 80% non-condensing. For best results, however, the cartons should be stored and used at 65° to 75° F (18° to 24° C), with a relative humidity of 30% to 45% (also the best environment for your printer).

In the event the printer is in an environment subject to extremes of relative humidity or temperature, it may be necessary to store the forms in a controlled environment and withdraw them on an as-needed basis.

Shipping

When paper is shipped through different environments, the entire stack of cartons on the pallet should be plastic wrapped. When shipping across large bodies of water, individual cartons should be wrapped as well.

Paper Specifications

Refer to Appendix B for information.

PREPARING THE PRINTER FOR OPERATION

This chapter will help you begin using your HP2566C/HP2567C printer. It explains how to load the ribbon and paper, adjust your printer for different sizes and thicknesses of paper, and set Top of Form.

Follow these instructions to install the ribbon. At this point, the printer's power can either be "ON" or "OFF."

Ribbon Removal and Replacement

Tools are not required to remove or replace the ribbon. The printer uses a towel-type ribbon (9282-0545) which is easily installed. Refer to Appendix C, "Ribbon Specifications," to verify that the ribbon being replaced meets the recommended specification listed in this document.

Note



Be careful not to touch the ribbon as you will get ink on your hands and clothing. A pair of plastic gloves and a moist towelette are normally included in each Hewlett-Packard ribbon package to help protect yourself from the ink.

Removing the Ribbon:

1. Open the upper ribbon access cover.

Raise the printer's top cover (Figure 3-1, A), and open the upper ribbon access cover (Figure 3-1, B) by gently pulling it toward you.

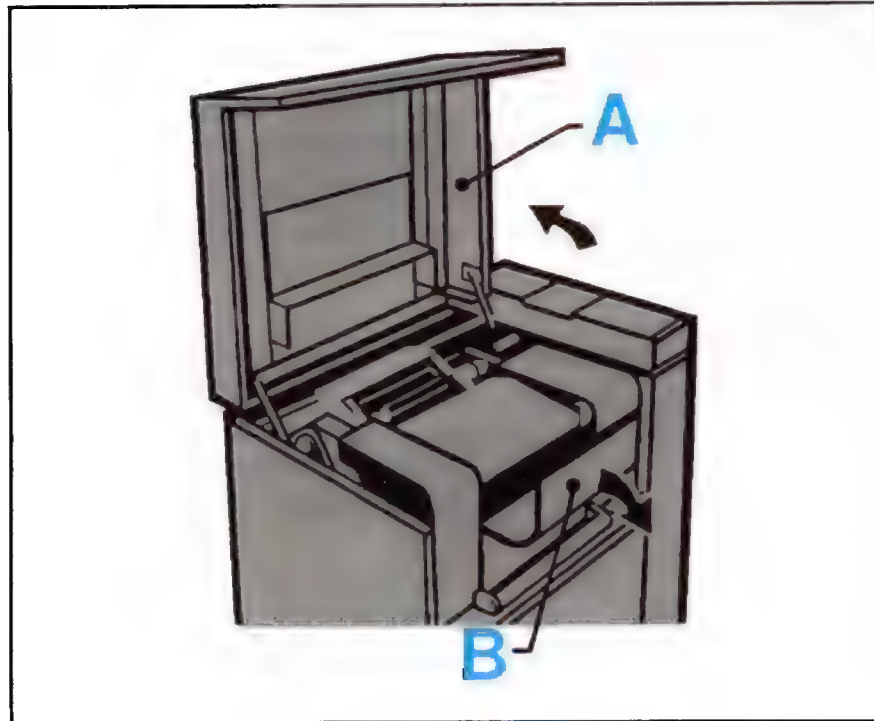


Figure 3-1. Opening the Ribbon Cover

2. Remove the ribbon spool.

Put on the plastic gloves. Remove the old ribbon spool from the drive hubs by sliding it to the left (Figure 3-2, A). Roll up the slack and place the spool in the retainer cups (Figure 3-2, B) at the rear of the swing-gate. Close the upper ribbon access cover.

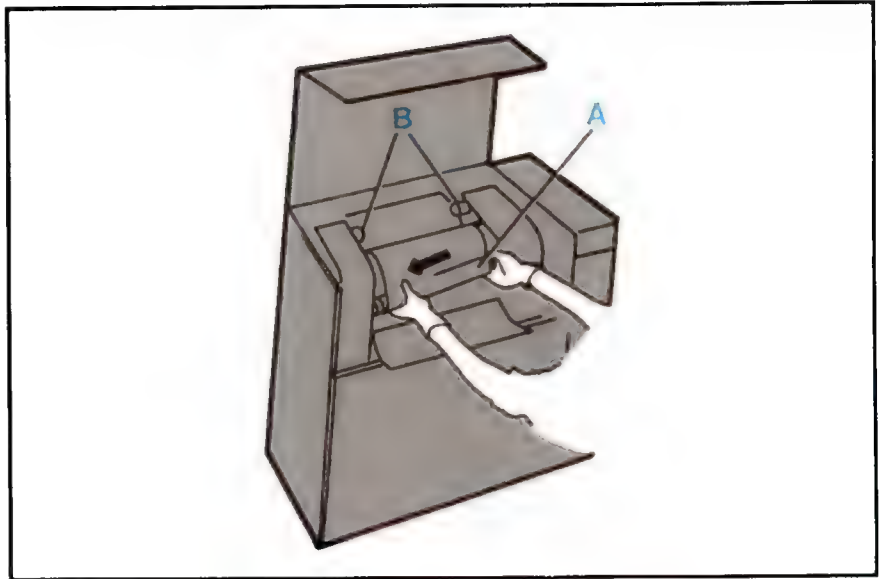


Figure 3-2. Removing Upper Ribbon Spool

3. Open the swing-gate.

Open the swing-gate by pushing down on the release lever (Figure 3-3, A) and lifting up the handle (Figure 3-3, B) until it latches at the top.

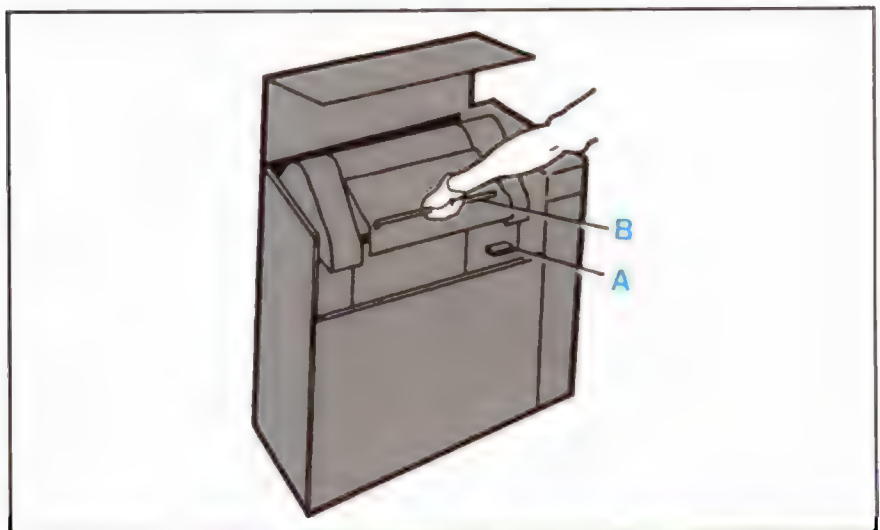


Figure 3-3. Opening the Swing-Gate

4. Lower the paper shield.

Pull downward on the paper shield to move it out of the way (Figure 3-4, A) and then open the lower ribbon access cover (Figure 3-4, B).

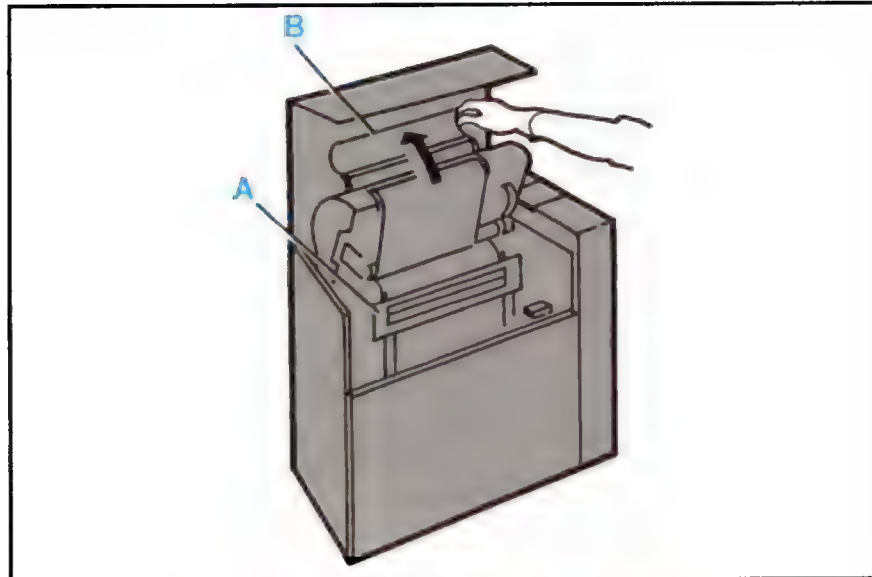


Figure 3-4. Accessing Lower Ribbon Spool

5. Remove the lower ribbon spool.

Remove the lower ribbon spool from its drive hubs by sliding it to the left (Figure 3-5).

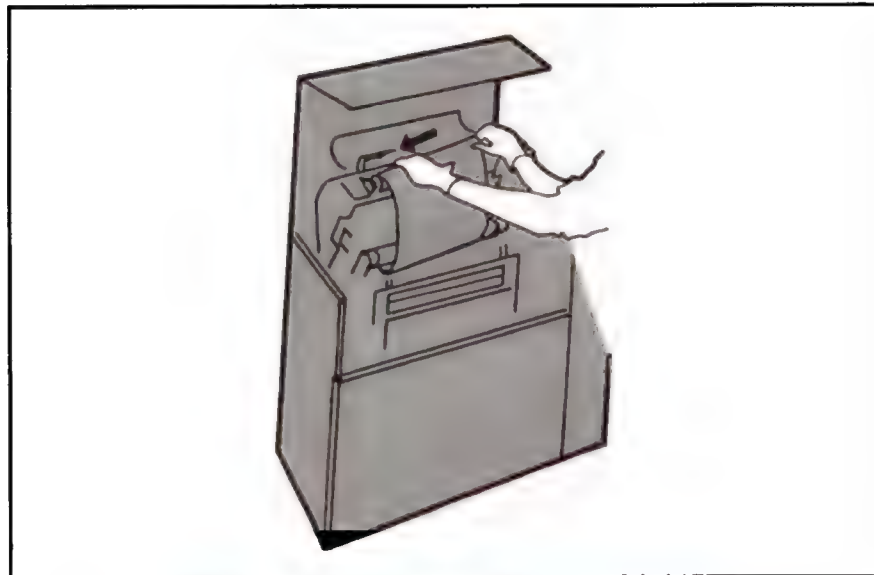


Figure 3-5. Removing Lower Ribbon Spool

6. Discard the old ribbon.

Remove the upper ribbon spool from the retainer cups. Throw away the used ribbon (Figure 3-6).

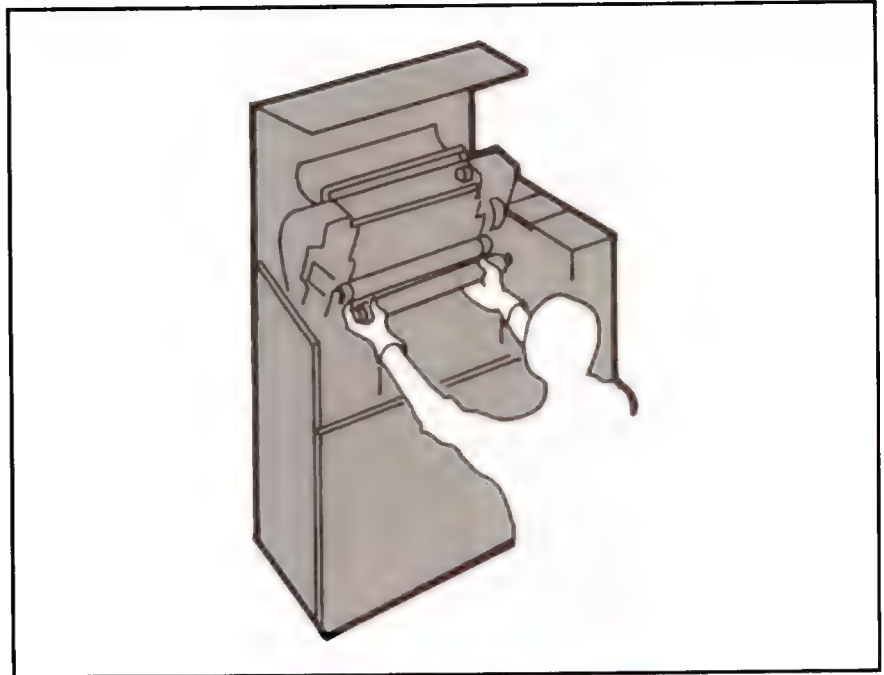


Figure 3-6. Removing the Ribbon

Replacing the Ribbon

When you replace a ribbon, the ribbon spools must be mounted correctly so they wind in the right direction (Figure 3-7). If the ribbon is on backwards it will not function properly. Also, make sure that both spools fit solidly into the drive hubs (rotate the spool until it snaps onto the drive hubs). If it does not fit correctly, the ribbon spool will be broken by the drive hub.

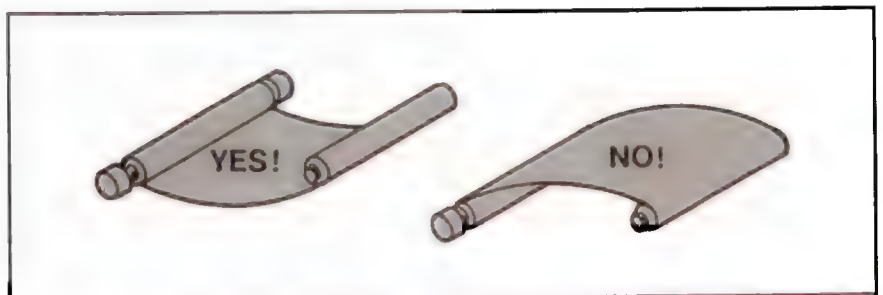


Figure 3-7. Correct Ribbon Winding Direction

1. Place spool on retainer cups.

Open the swing-gate completely until it latches at the top. Lower the ribbon shield and open the ribbon access cover (refer to Figure 3-4, B). Put on the plastic gloves supplied in the ribbon box and place one of the ribbon spools on the retainer cups as shown in Figure 3-8.

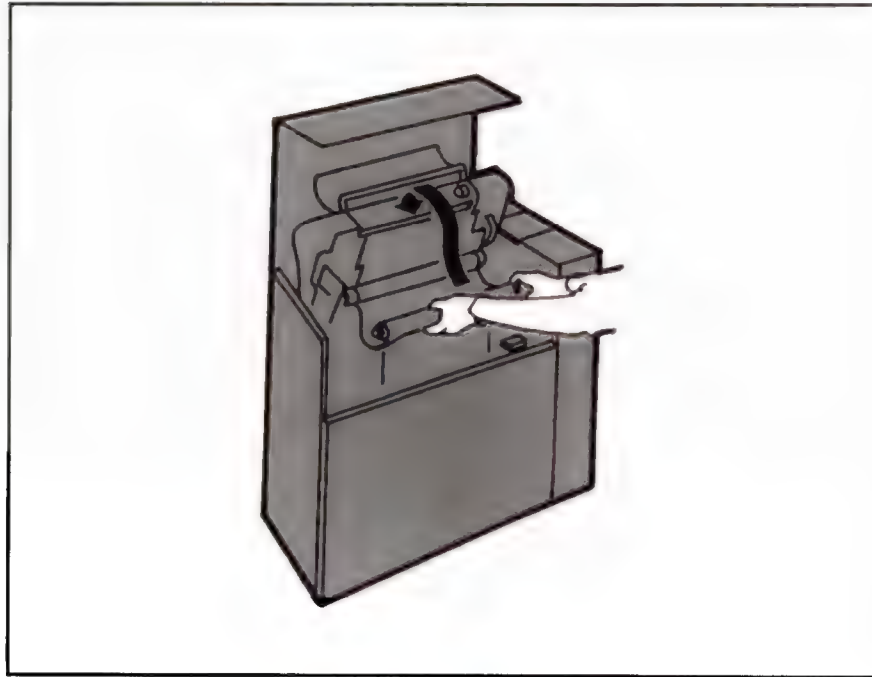


Figure 3-8.

Lowering Ribbon Shield and Opening Ribbon Access Cover

2. Install lower ribbon spool.

Route the ribbon up and over the ribbon sensing bar (Figure 3-9, A). Install on the lower ribbon drive hubs by sliding toward the left (Figure 3-9, B).

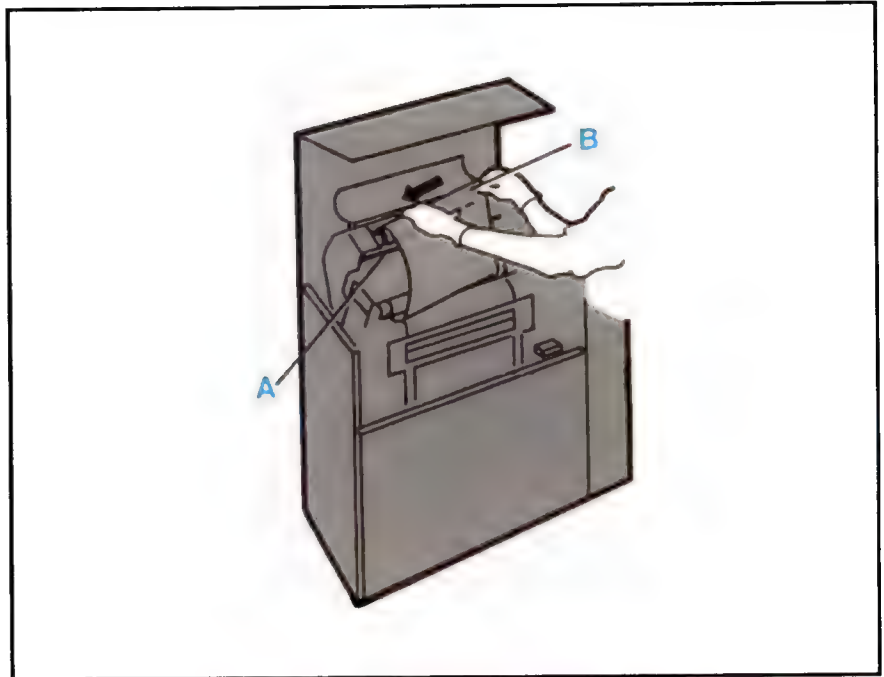


Figure 3-9. Installing Lower Ribbon Spool

3. Close lower access cover and ribbon shield.

Pull the lower ribbon access cover toward you to close. Lift the paper shield up to close (Figure 3-10).

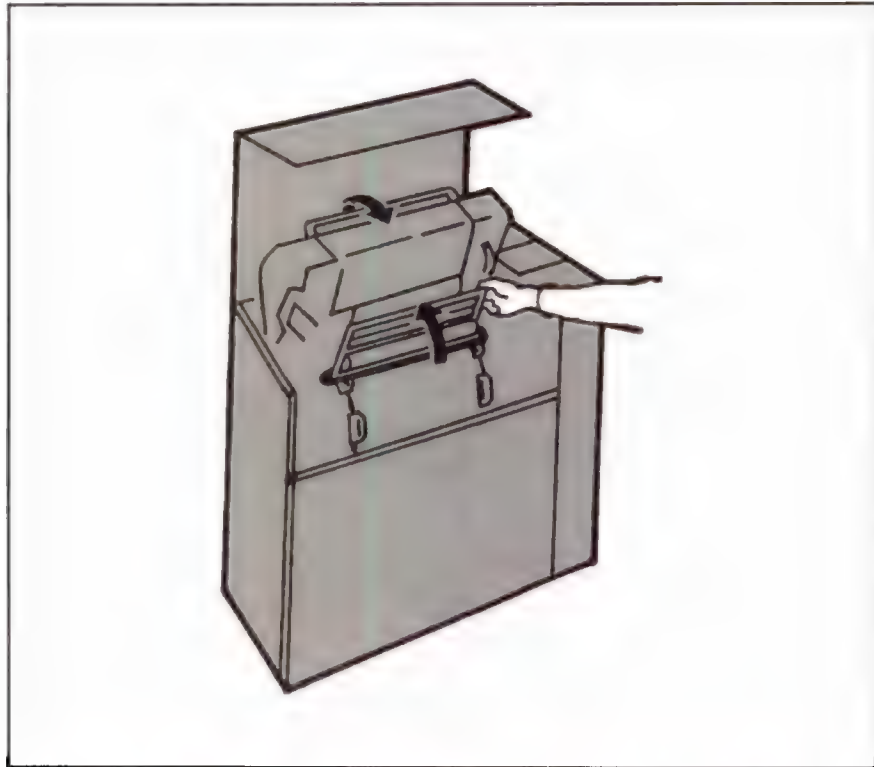


Figure 3-10. Closing Lower Ribbon Cover and Paper Shield

4. Close swing-gate and open upper access cover.

Push the swing-gate handle down to close. Open the upper ribbon access cover by gently pulling it toward you.

5. Install upper ribbon spool.

Lift the ribbon spool from the retainer cups (Figure 3-11, A). Install on the upper ribbon drive hubs by sliding toward the left (Figure 3-11, B).

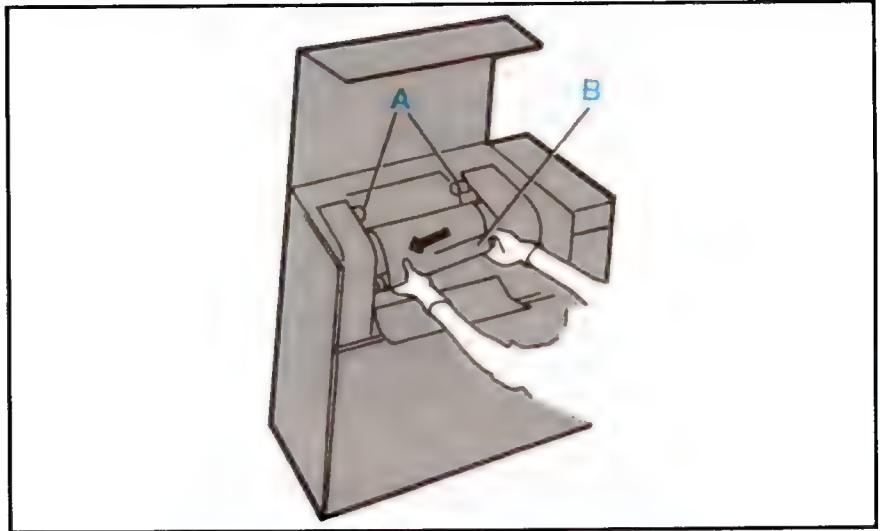


Figure 3-11. Installing Upper Ribbon Spool

6. Close the printer.

Raise the upper ribbon access cover up into the closed position and close the printer's top cover (Figure 3-12).

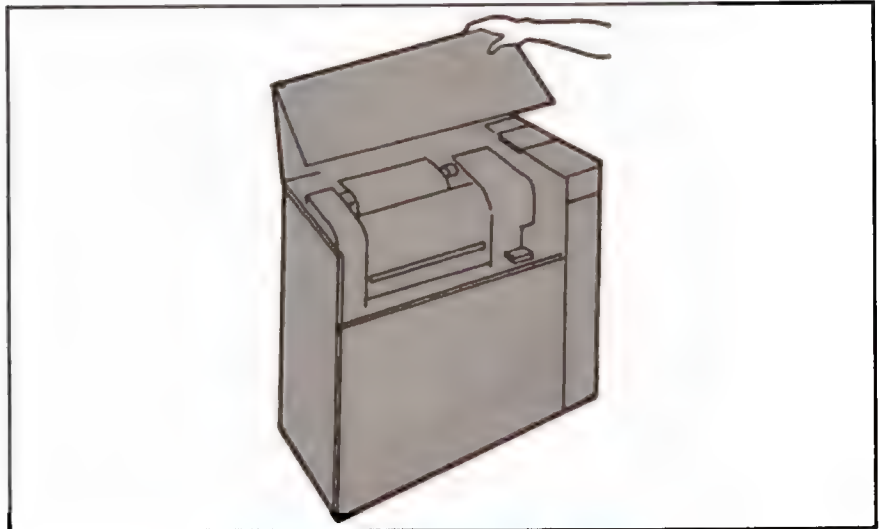


Figure 3-12. Closing the Printer

Paper Loading and Adjustment

The rest of this chapter explains how to load, adjust, and position your paper in the printer. The instructions are written in sequence, and, if followed in order, detail the correct procedure to set up your printer for operation.

Note



When the printer runs out of paper, it completes printing the last page and goes “off-line.” At this point, the paper is at the Top of Form position.

1. Operator Information Label.

An Operator Information Label is located on the inside of the printer for easy reference to error and configuration modes, setting forms position and Top of Form, and other printer functions.

2. Turn the printer "ON."

On the back panel of the printer, flip the power switch to the “ON” (1) position. The printer must be “ON” to perform set-up functions. Raise the printer’s top cover and open the cabinet’s front door (Figure 3-13).

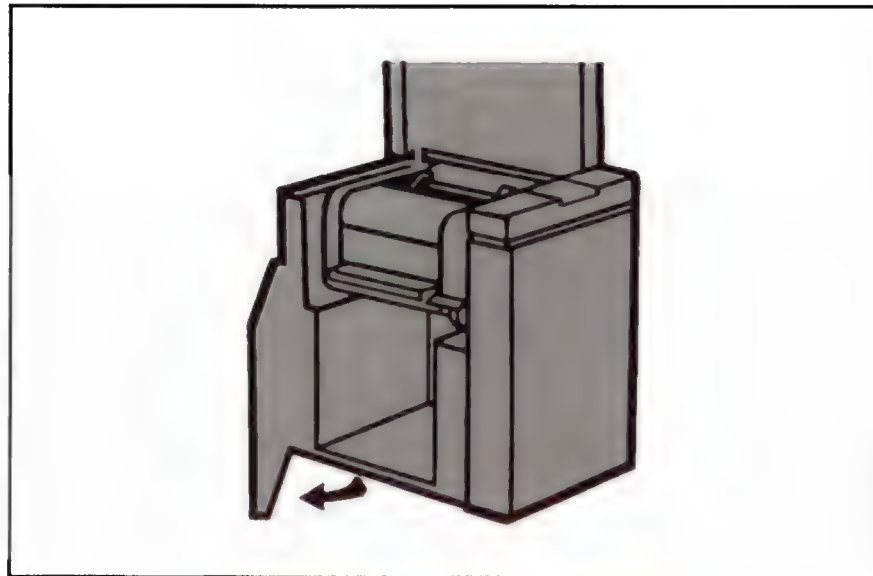


Figure 3-13. Opening the Printer

3. Open the swing-gate.

Push down on the swing gate release lever (Figure 3-14, A) and lift up the swing-gate by the handle (Figure 3-14, B) until the gate latches at the top.

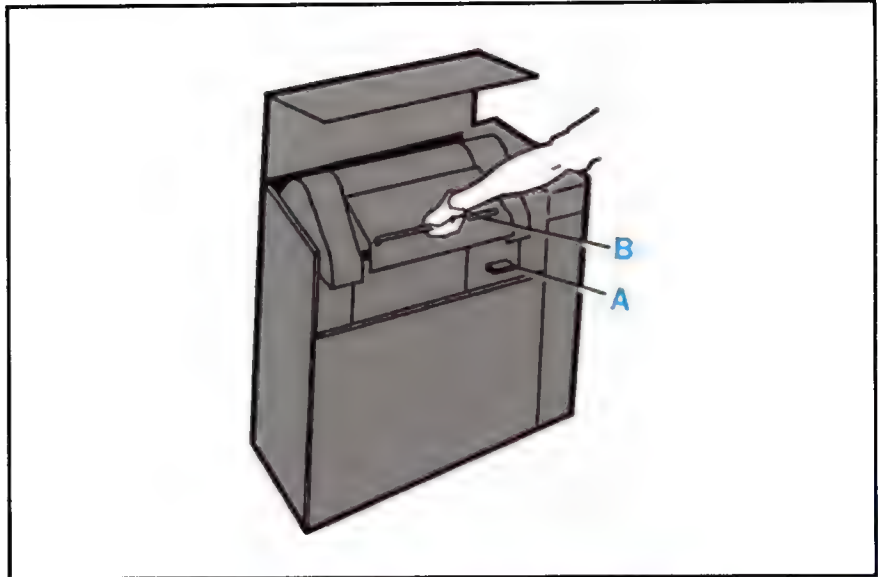


Figure 3-14. Opening the Swing-Gate

4. Open the platen.

Pull out the spring plunger knob and move the paper thickness adjustment lever to the maximum thickness setting, "N" (Figure 3-15). This will prepare the printer for the final forms thickness adjustment later in this chapter.

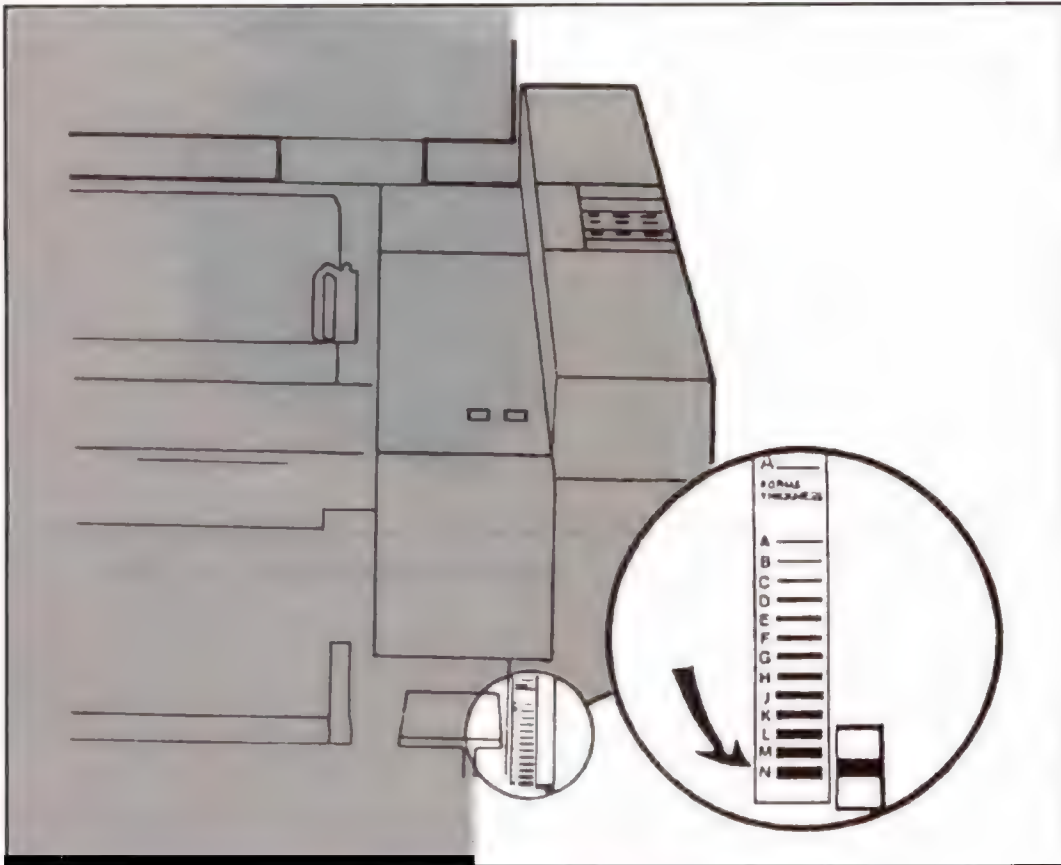


Figure 3-15. Opening the Platen

5. Open the tractors.

Flip open the tractor lids.

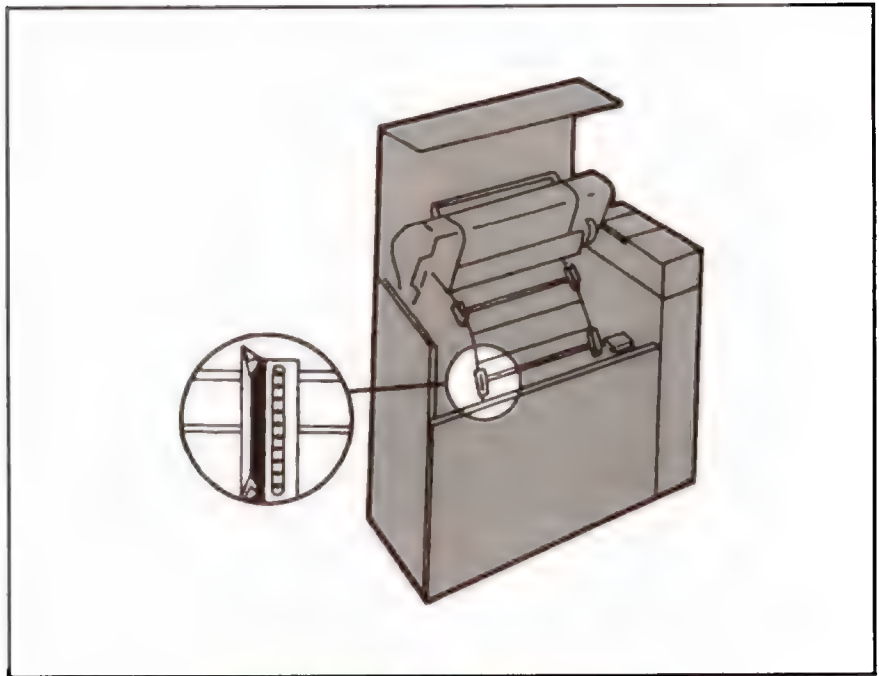


Figure 3-16. Opening the Tractors

6. Position the paper.

Position the paper supply on the floor of the cabinet so that it is all the way forward, towards the door. Then, center it under the tractors (Figure 3-17). DO NOT RUN PAPER FROM A BOX PLACED OUTSIDE THE PRINTER CABINET.

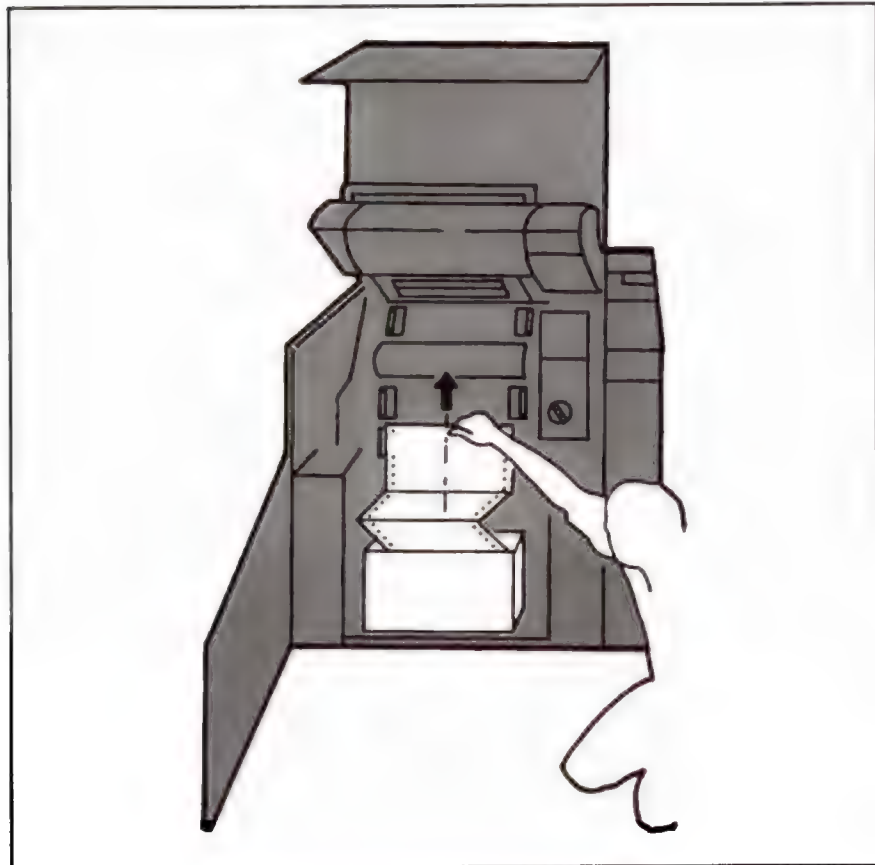


Figure 3-17. Positioning the Paper

Note



Paper jams can occur because the sides of the box are too close to the paper stack. Pull the sides of the box away from the stack to let the paper move freely through the printer.

7. Continue loading paper.

Proceed to “Adjusting Vertical Paper Tension” on page 3-15.

Adjusting Vertical Paper Tension

A slight paper tension aids print quality and is important for proper operation of your printer. If the paper tension is too loose, marginal print quality occurs. If the paper tension is too tight, paper will come out of the tractors causing a paper jam. After you make a preliminary tension adjustment, proceed to page 3-17 to adjust the forms position and make the final adjustment.

Note



Make sure you adjust vertical paper tension each time you load paper.

1. Position the vertical tension lever.

Pull out the spring plunger knob and place the vertical tension lever in the "A" position (Figure 3-18, A). Place the paper in the two left tractors and close the tractors.

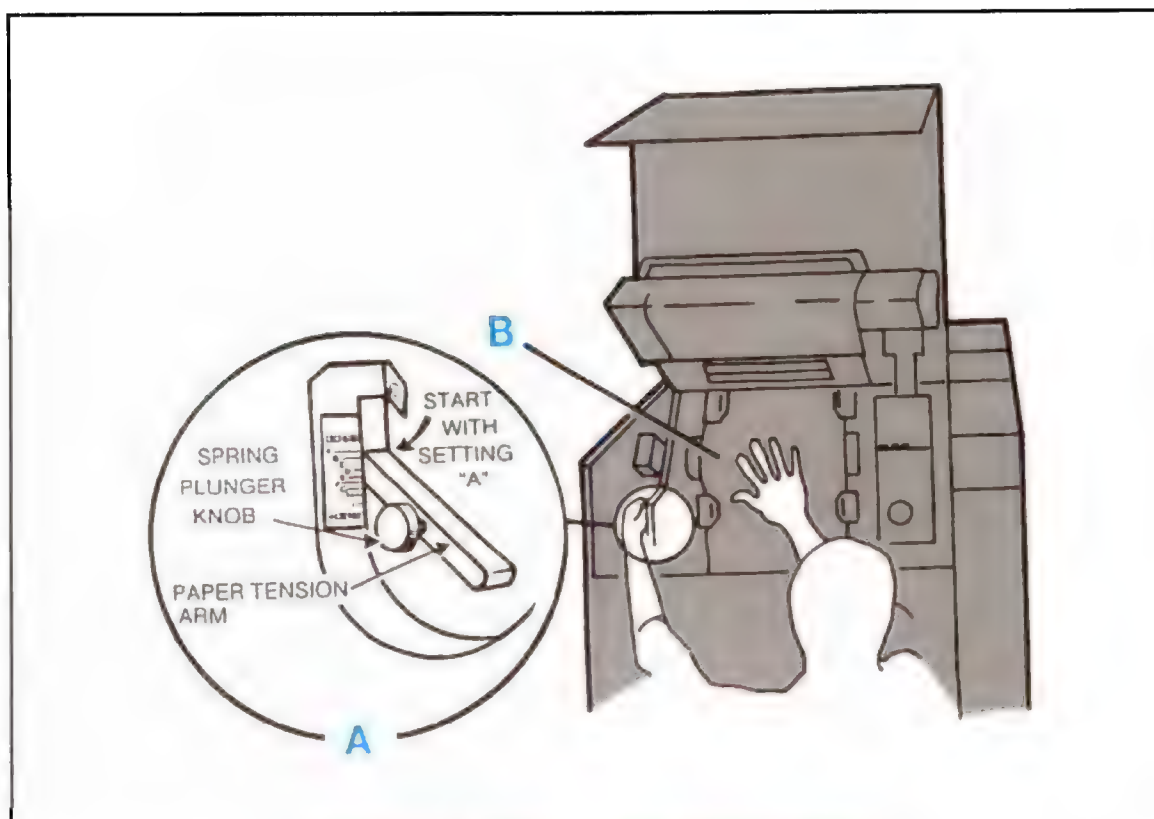


Figure 3-18. Adjusting Vertical Paper Tension

2. Preliminary adjustment of vertical paper tension.

Pull out the spring plunger knob again (Figure 3-18, A) and move the lever downward until the paper is slightly taut against the platen. (The platen is located in the curved black surface lying between the upper and lower tractors.) To test the tension, place your hand on the paper over the black surface and gently push the paper up and down (Figure 3-18, B). If the paper moves freely, the vertical tension is too loose. When the tension is correct, you will notice only slight vertical looseness and no paper feed hole distortion.

Adjusting Forms Position

Use this procedure when you change the position of the form in the printer, or want to set the horizontal paper tension. These instructions prepare your printer for the next step, "Adjusting Forms Thickness" on page 3-21.

Note



Too little or too much horizontal tension can cause paper jams in the printer.

1. Adjust the left paper path.

With the swing-gate latched in the full open position, set the tractor control knob to FORMS ALIGNMENT POSITION (Figure 3-19, A). Press either of the tractor control keys (Figure 3-19, B) left or right until the left tractors (Figure 3-19, C,D) are in the desired position for printing the left page margin. Holding the center key down while pressing the left or right key will increase the speed that the tractors move.

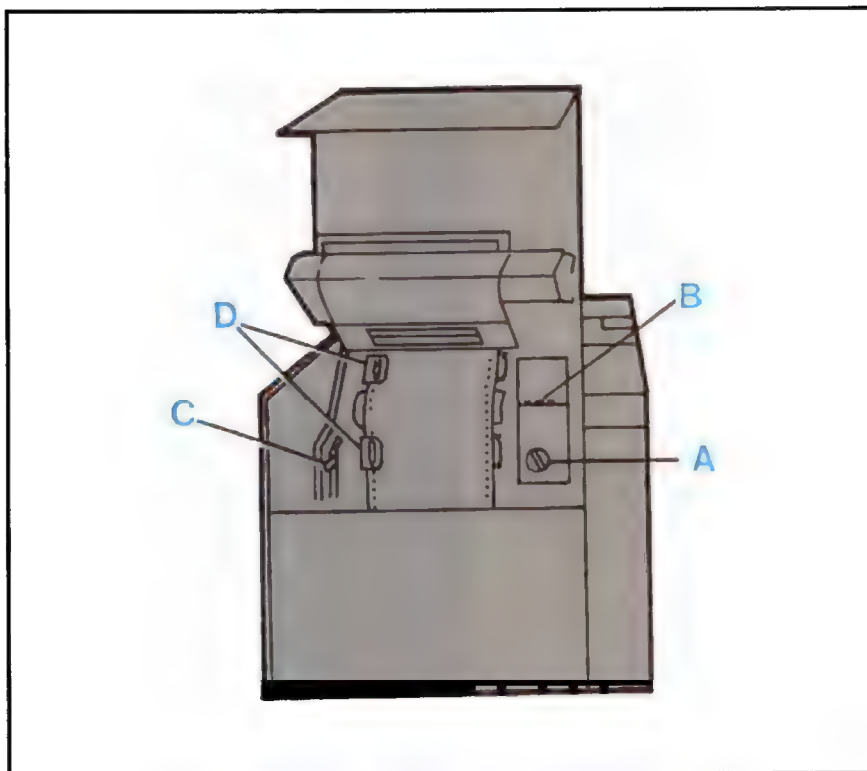


Figure 3-19. Tractor Controls

2. Adjust the right tractor.

Set the tractor control knob to the **FORMS WIDTH ADJUST POSITION** (Figure 3-20, A). Only the right tractors should move; the left tractors should remain stationary. Press the right tractor control key to increase the forms width position (Figure 3-20, B). To decrease the forms width position, press the left tractor control key until the tractors are narrower than the form (Figure 3-20, B, **HORIZONTAL ADJ.**).

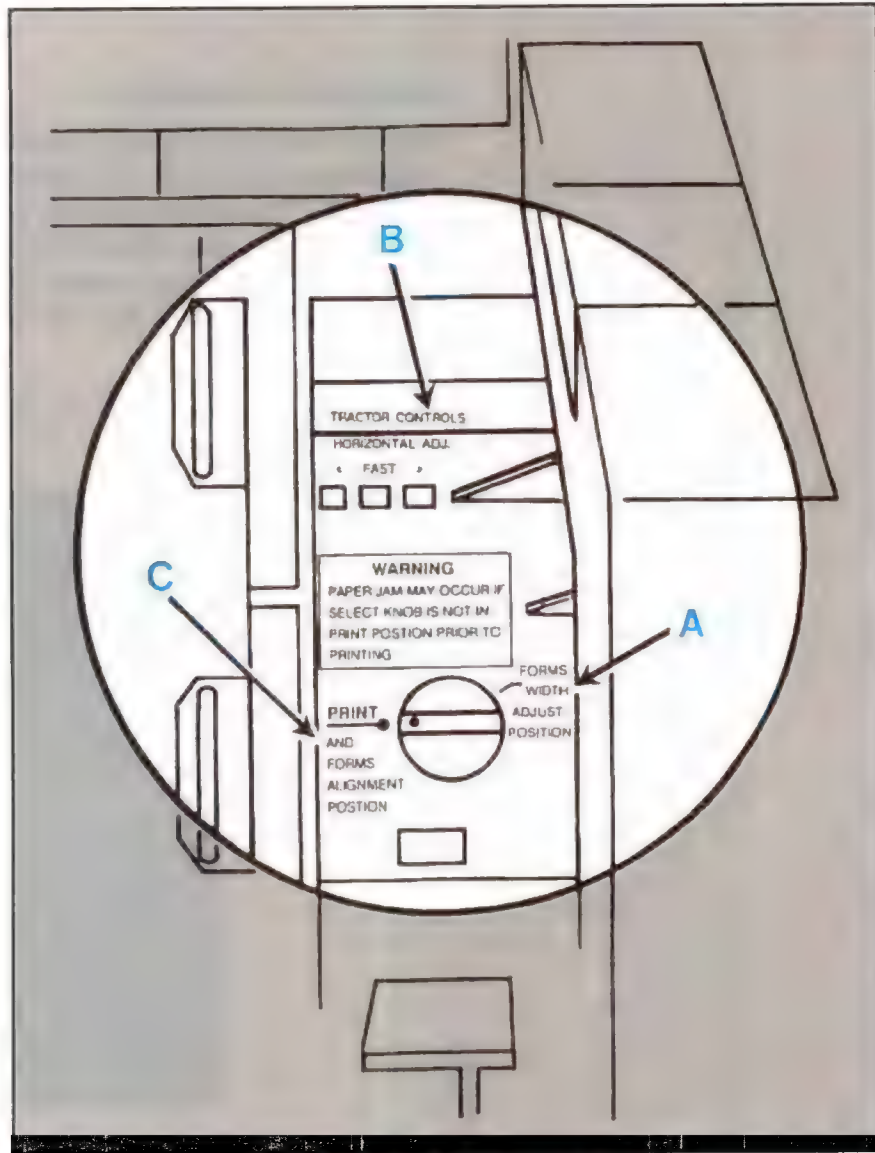


Figure 3-20. Adjusting Forms Position

3. Close the right tractors.

Insert the paper into the two right tractors and close the tractors.

4. Adjust the horizontal tension.

With the tractor control knob still in the FORMS WIDTH ADJUST POSITION, fine adjust the tractor positioning by touching the right tractor control key (Figure 3-20, B) until there is a slight horizontal tension on the paper. When the tension is correct, reset the tractor control knob to the PRINT AND FORMS ALIGNMENT POSITION (Figure 3-20, C).

Note



Be sure the tractor control knob is reset to the PRINT AND FORMS ALIGNMENT POSITION before printing or you may have form feed problems.

5. Final vertical paper tension adjustment.

Make sure the tractors line up vertically with the holes in the paper. If they do not, align them by pulling out the spring plunger knob and moving the vertical paper tension lever up or down (Figure 3-18, A). Close the tractors. (For detailed adjustment instructions refer back to step 2, "Preliminary Adjustment of Vertical Paper Tension," on page 3-16.)

6. Test paper motion.

Press and hold the **LINE FEED** key for several seconds to advance paper into the powered paper stacker. Press the **FORM FEED** key two or three times to make sure that the paper moves freely over the platen.

7. Inspect paper tractor holes.

Inspect the holes in the paper's tractor strips that have just passed through the tractors. They should have a slight teardrop shape (Figure 3-21, A). If the holes show an extreme distortion (Figure 3-21, B) or the paper jams, pull out the spring plunger knob (refer to Figure 3-18) and move the vertical paper tension lever one position toward "A." Press the **FORM FEED** key again and re-examine the tractor holes.

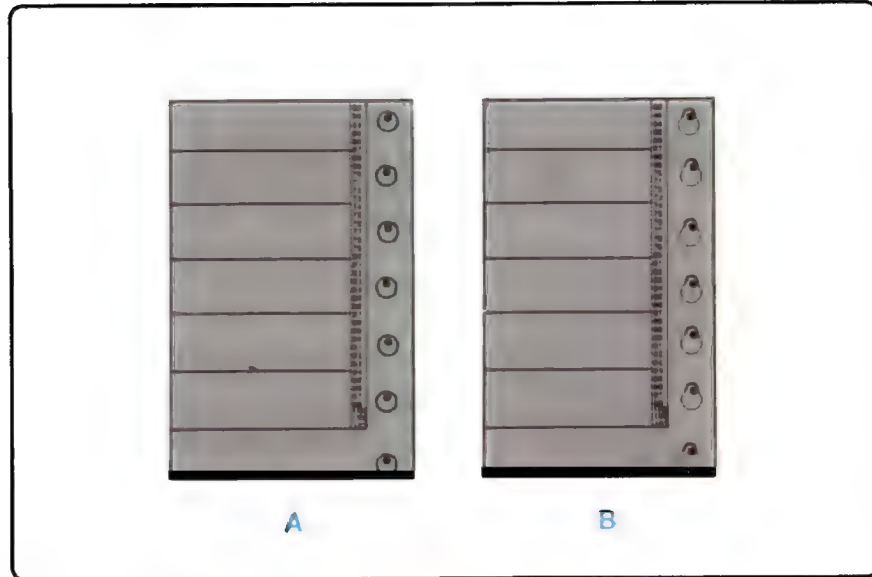


Figure 3-21. Tractor Strip Distortion

8. Proceed to "Adjusting Forms Thickness."

Follow the instructions on page 3-21 to adjust the thickness setting for your form.

Adjusting Forms Thickness

The forms thickness adjustment allows the printer to accommodate various thicknesses of paper, such as when changing from single to multi-part forms, or when using different weights of paper. The result of setting forms thickness correctly is optimum print quality. These procedures explain how to correctly set forms thickness and run a sub-test to determine best print quality.

1. Position the forms thickness lever.

If the lever is not already positioned at maximum thickness setting, "N" (as per instruction 4 on page 3-12), pull out the spring plunger knob and set it at this time (Figure 3-22).

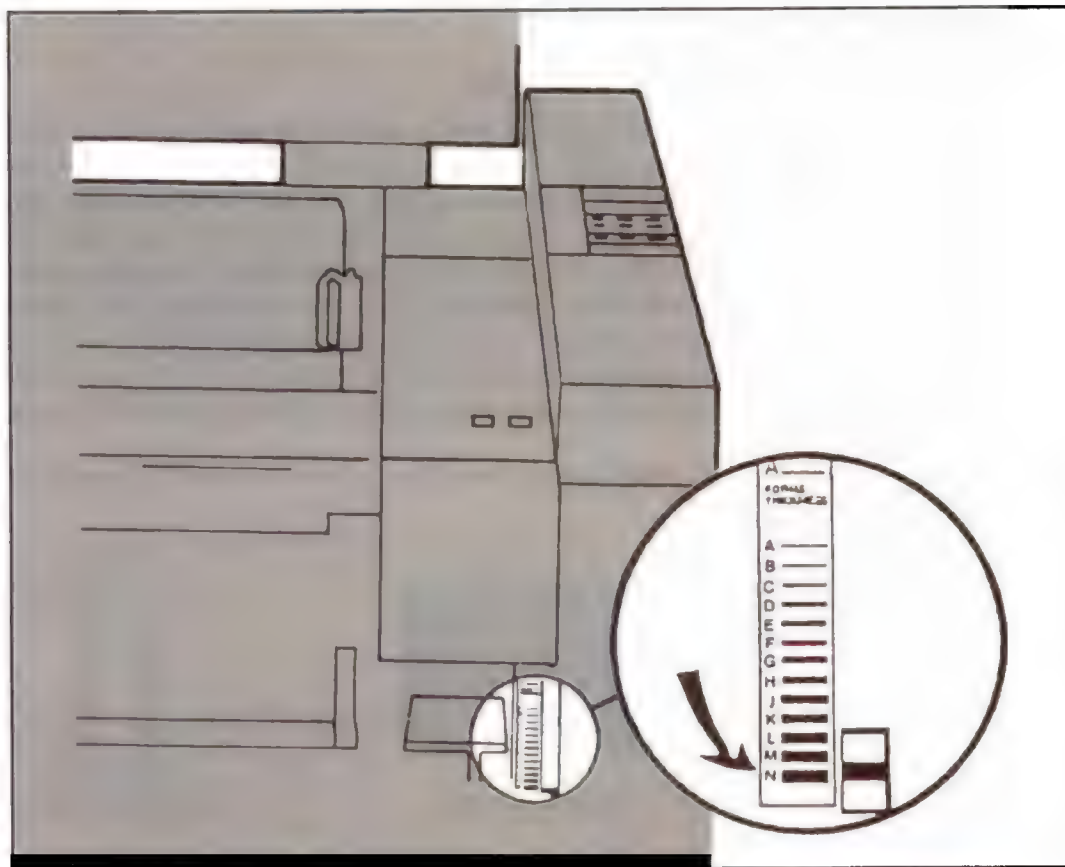


Figure 3-22. Setting the Forms Thickness Lever at Maximum Thickness

2. Adjust the setting for print quality.

Move the lever one or two positions at a time toward the minimum thickness setting, "A," and then run sub-test 15 until you find optimum print quality.

3. Run sub-test 15:

a. Enter the TEST mode.

Push the **TEST** key to enter the TEST mode (two decimal points will light up). Use either **FINE ADJ.** key to find sub-test 15 (a pattern of horizontal and vertical lines). Press **ENTER** to start the test.

b. Examine the print.

Use the **FORM FEED** key to eject the page out of the powered paper stacker. Examine the vertical lines. They should be straight. If they are somewhat jagged, with the individual dots offset to the right and left, this is called "dot slalom" (Figure 3-23). It signifies that the print gap is too large (the higher the letter on the knob, the wider the print gap). To decrease the gap, turn the forms thickness knob one position towards the smaller letters. If the ink is smudging on the paper, the print gap is too small; increase the setting by turning the knob one position toward the larger letters.

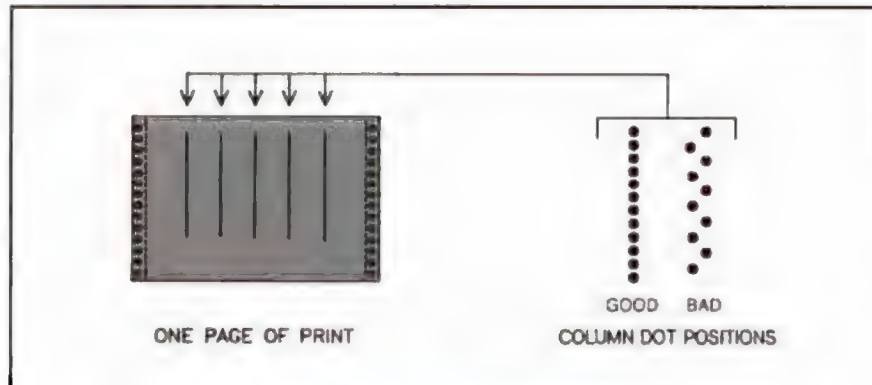


Figure 3-23. Dot Slalom

c. Return to step "1."

Continue to adjust the thickness setting and run sub-test 15 until the vertical lines are straight and the best print quality is obtained. If you are having print quality problems, see "Optimizing Print Quality" on page 6-14 for information.

Note



When printing in draft mode, tighten the paper thickness adjustment lever up one additional position.

4. Check overall print quality.

At this point, your printer is set-up to obtain best print quality. Follow the instructions on page 3-24 to run sub-test 9 and examine the printed characters.

Overall Print Quality

Run sub-test 9 to check the **overall** print quality of your printer. Inspect the upper case characters on the printout for "character scrunch."

1. Select sub-test 9.

Press the **TEST** key to enter the TEST mode (two decimal points will light up). Use either **FINE ADJ.** key to find sub-test 9. Press **ENTER** to start the test.

2. Examine the characters.

Use the **FORM FEED** key to eject the page. Examine the printed characters. They should look even and well formed. If they appear "squatty" or "scrunched," this is called "character scrunch," and indicates that the paper tension is too loose (Figure 3-24).

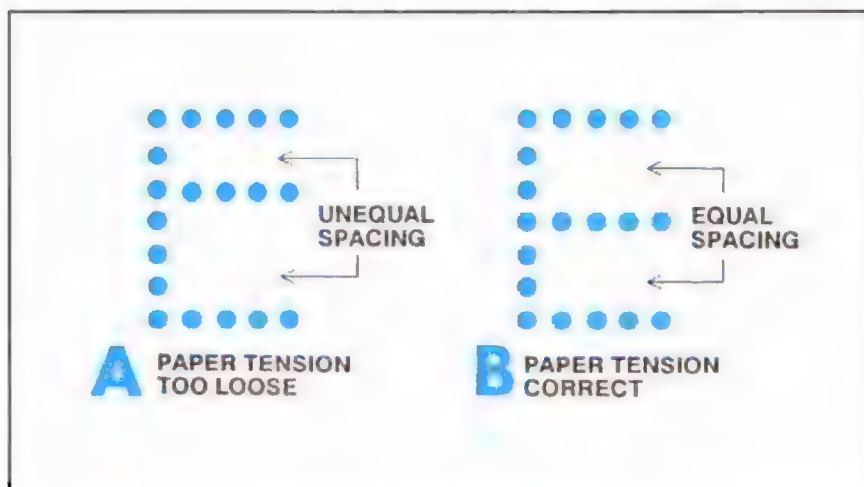


Figure 3-24. Character Scrunch

3. Adjust vertical paper tension.

To correct "character scrunch," move the vertical paper tension lever toward "N" one position at a time. Continue to run sub-test 9 and adjust the setting until optimum print quality is achieved.

4. Proceed to "Adjusting Forms Length."

Turn to page 3-25 for instructions on "Adjusting Forms Length."

Adjusting Forms Length

Forms length is the amount of text lines your printer can print per page. It can be set two ways: $\frac{1}{2}$ inch increments or text lines-per-page. Both methods are explained below. If you are setting forms length for the first time, or changing forms length to a new paper size, follow these instructions.

Note



If you do not need to adjust the forms length, continue to the next section, "Adjusting Top of Form," on page 3-30.

Figure 3-25 defines areas on the form you need to consider when setting forms length.

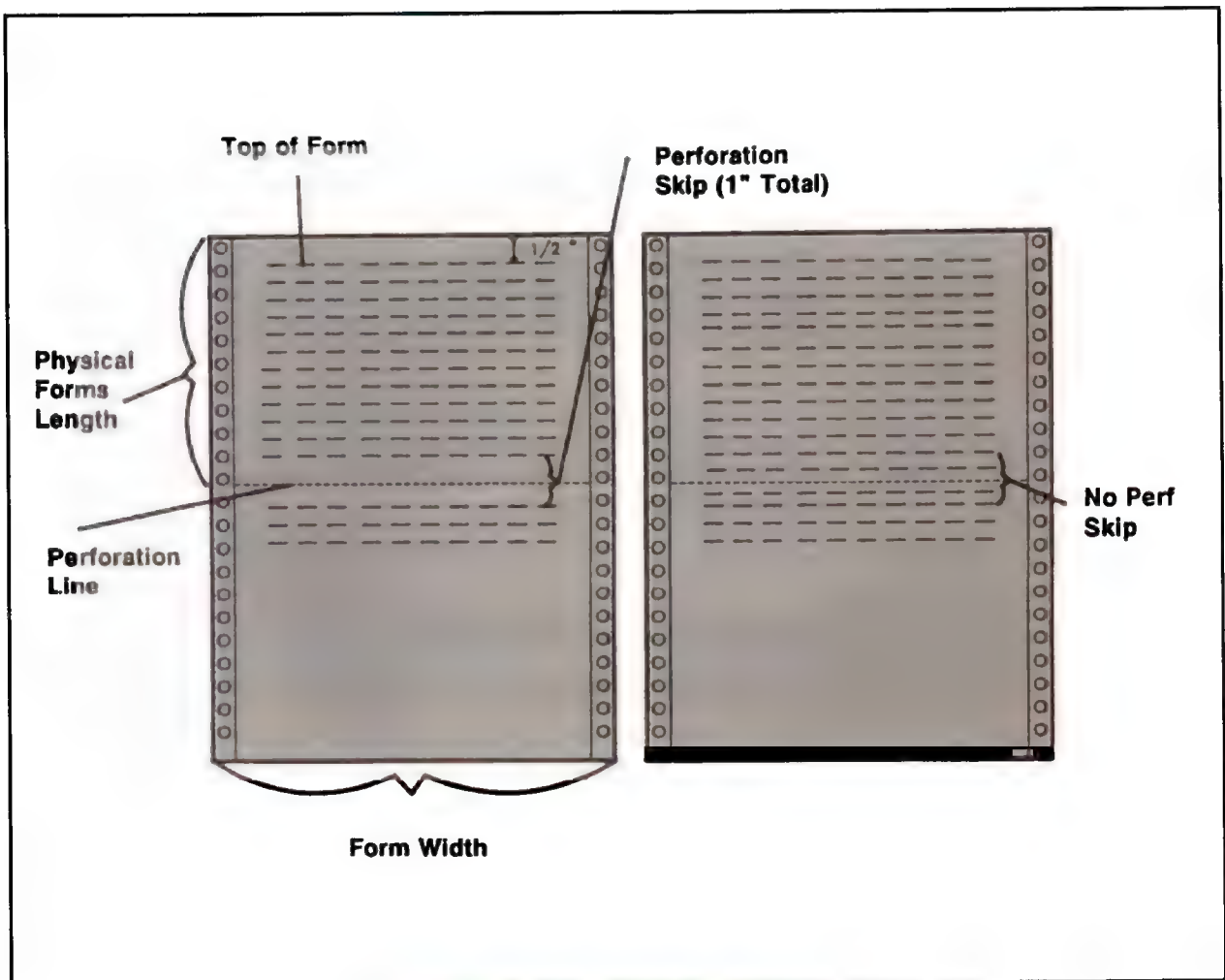


Figure 3-25. Parts of the Form

Adjust Physical Forms Length in $\frac{1}{2}$ Inch Increments.

The forms length can be set in $\frac{1}{2}$ inch increments from 2 to 16 inches. If you want to set forms length in increments other than $\frac{1}{2}$ inch, turn to page 3-27 to adjust forms length in physical text lines-per-page.

Use the keys on the control panel to set the forms length:

1. Enter the configuration mode.

Press and hold down the **CONFIG.** key. At the same time, press the **FINE ADJ.** keys to move to function 7 (the decimal points indicate the CONFIGURATION mode). Release the **CONFIG.** key. A "1" or a "0" lights up in the display window. You want setting "0." Press either **FINE ADJ.** key to move to "0" (if "0" is already displayed, press **ENTER**).

2. Press **ENTER**

This programs the printer to set forms length in $\frac{1}{2}$ inch increments.

3. Press **PAGE L. ADJ.**

The current page length setting is displayed in inches. A decimal point allows the number to be a fraction. For example, a setting of 8.5 is actually 8 $\frac{1}{2}$ inches. A setting of 11.0 is 11 inches.

Note



If you do not want to change the page length, press the **PAGE L. ADJ.** key a second time to return to the STATUS mode, or press **ON LINE** to return the printer to the host.

4. Change the page length setting.

Use the **FINE ADJ.** keys to move to the desired page length.

5. Press **ENTER**

The printer returns to the STATUS mode (a "0" appears in the display window) indicating that the desired page length is entered.

6. Proceed to "Adjusting Top of Form."

Turn to page 3-30 to adjust the Top of Form position.

Adjust Forms Length in Physical Text Lines-Per-Page.

The forms length can be set in number of printable text lines-per-page. The printer can be set at 6 LPI (lines-per-inch), to print 12 to 96 lines of physical text per page, or 8 LPI, to print 16 to 128 lines of physical text per page. It can also be set to operate with perforation skip "ON" or "OFF." To adjust forms length in physical text lines-per-page, you must set perforation skip, LPI, and forms length in this order.

Set Perforation Skip.

Perf (perforation) skip provides a 1 inch vertical margin that, when properly positioned via the Top of Form setting, prevents printing on the perforated line.

Example:

When printing an 11 inch form at 6 LPI with perf skip "OFF," 66 lines will be printed with no margin allowed for the perforation. When perf skip is "ON," the text length is limited to 60 lines, thus allowing for a 1 inch vertical margin. If Top of Form is set to begin printing $\frac{1}{2}$ inch below the perf, the next perf will be centered within the 1 inch margin. At 8 LPI, the maximum text length would be reduced from 88 to 80 lines (refer to Figure 3-25).

Turn perf skip "ON."

The perf skip default setting for your printer is "OFF." To turn perf skip "ON," follow these instructions:

1. Enter configuration function 60.

Press and hold down the **CONFIG** key. At the same time, press either **FINE ADJ.** key to move to function 60 (the decimal points indicate the CONFIGURATION mode). Release the **CONFIG** key. A "0" lights up in the display window.

2. Change to "1."

Use either **FINE ADJ.** key to move to "1."

3. Press **ENTER**

This turns perf skip "ON."

Turn perf skip "OFF."

Follow steps 1, 2, and 3 above, but enter "0" instead of "1."

With perf skip “OFF,” the printer will print whatever number you enter for physical text lines-per-page. If the number exceeds the maximum physical lines the printer can print per page, it will print in the perf skip region.

For more information on perf skip, refer to the section on “Perforation Skip Mode” in the *HP256X Printer Family Technical Reference Manual, 02564-90905*.

Note



Perf skip mode is only applicable when using line feed instruction applications (line count). If the application uses calls to Vertical Forms Control (VFC) channels, the VFC definition of vertical margin is used and the state of the perf skip mode has no effect.

Set LPI (lines-per-inch).

Once you have determined the perf skip mode, the next step is to set LPI.

1. Press **L.P.I. ADJ.**

The present LPI setting shows up in the display window (the decimal points indicate the CONFIGURATION mode).

2. Change the LPI setting.

If you want to change the value, use either **FINE ADJ.** key to move to the desired LPI setting (both keys toggle between 6 and 8). If you do not want to change the value, press the **L.P.I. ADJ.** key again to return to the STATUS mode (a “0” appears in the display window) and proceed to set the forms length.

3. Press **ENTER**

The printer returns to the STATUS mode (a “0” appears in the display window) indicating that the desired setting is entered.

Set forms length.

After determining the LPI setting, use the keys on the control panel to set the forms length:

Note



If you set forms length in programmable Vertical Forms Control (VFC), make sure the same setting is entered in the front panel. Otherwise, the printer will continue to print when paper-out occurs.

1. Enter the configuration mode.

Press and hold down the **CONFIG.** key. At the same time, press either **FINE ADJ.** key to move to function 7 (the decimal points indicate the CONFIGURATION mode). Release the **CONFIG.** key. A "1" or a "0" lights up in the display window. You want setting "1." Press either **FINE ADJ.** key to move to "1" (if "1" is already displayed, press **ENTER**).

2. Press **ENTER**

This programs the printer to set forms length in lines-per-page.

3. Press **PAGE L. ADJ.**

The current number of text lines-per-page is displayed.

Note



If you do not want to change the text lines-per-page, press the **PAGE L. ADJ.** key a second time to return to the STATUS mode, or press **ON LINE** to return the printer to the host.

4. Change the setting.

Use either **FINE ADJ.** key to move to the desired number of text lines-per-page.

5. Press **ENTER**

The printer returns to the STATUS mode (a "0" appears in the display window), indicating that the desired page length is entered.

6. Proceed to "Adjusting Top of Form."

Turn to page 3-30 for instructions on "Adjusting Top of Form."

Adjusting Top of Form

The Top of Form (TOF) position is an arbitrary indicator of the first line of print. Once the Top of Form is set, any succeeding **FORM FEED** advances paper one page length until the same position on the next page is reached. This enables you to move swiftly to the first print line on the succeeding page.

Adjust Top of Form using the keys on the Operator Control Panel.

Note



In order to set Top of Form, the swing-gate must be open and latched at the top. The number 10 will flash in the display window indicating that the swing-gate is open; however, disregard this message for now.

1. Adjust the paper.

Use the **LINE FEED** or **FINE ADJ.** keys to adjust the paper so the paper perforation is directly over the metal platen strip (Figure 3-26).

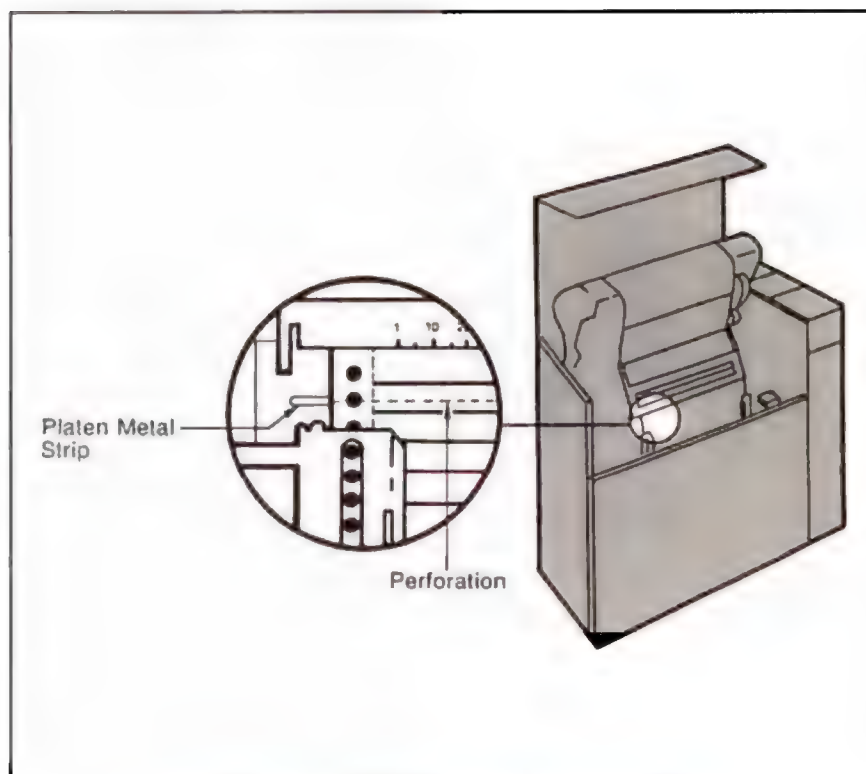


Figure 3-26. Adjusting Paper Over the Platen

2. Lower the paper shield.

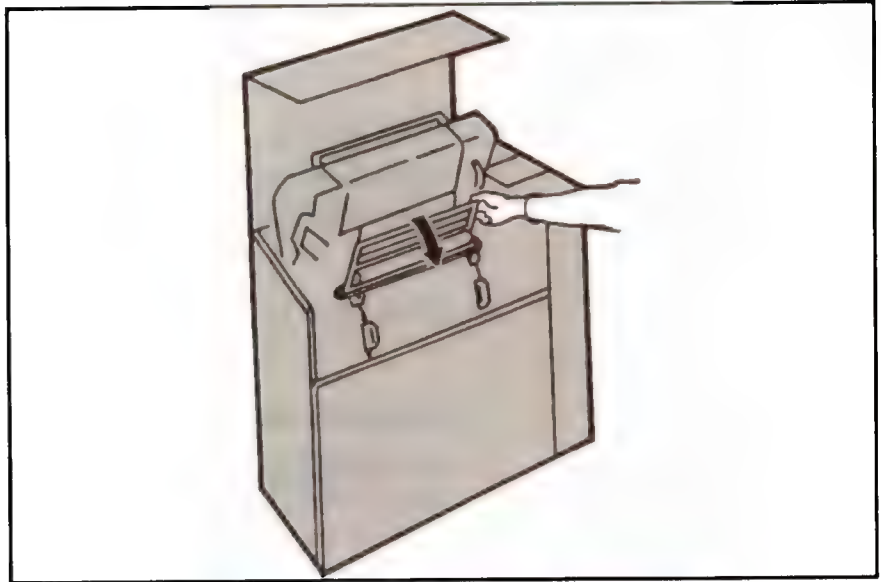


Figure 3-27. Lowering the Paper Shield

3. Adjust horizontal forms alignment.

The numbers on the paper shield (Figure 3-28) are indicators to determine your first column of print. Set the tractor control knob to the FORMS ALIGNMENT POSITION (Figure 3-19, A) and move the left tractor control key (Figure 3-19, B) to position the paper to the first column of print.

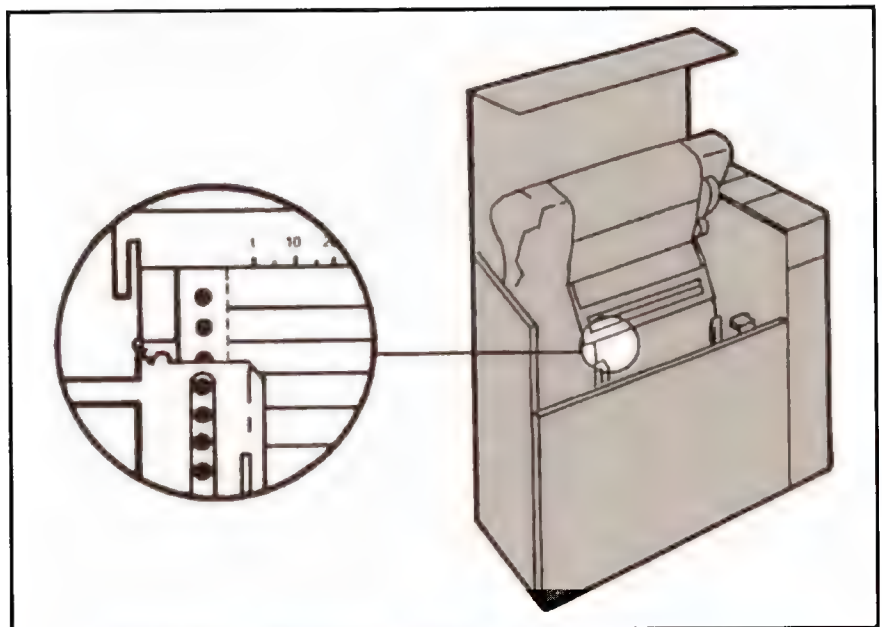


Figure 3-28. Positioning Paper to the First Column of Print

4. Press **SET T.O.F.**

Three decimal points in the display window illuminate to indicate the SET T.O.F. mode.

5. Press **ENTER**

This sets the new Top of Form position and returns the printer to the printer ready STATUS mode.

6. Close the swing-gate.

7. Verify the Top of Form position.

Use the **TEST** key and **PRINT 1 LINE** key to determine if the Top of Form setting is correct. If not, repeat step 1 on page 30 to adjust your paper to the desired position.

Note



If a paper-out error was in effect before the **SET T.O.F.** key was pressed, setting the Top of Form clears the error.

Top of Form Alignment Guide Labels

These labels provide easy alignment of frequently used forms. They are provided with each printer; however, additional sheets (02566-00223) may be purchased through your Hewlett-Packard Sales offices.

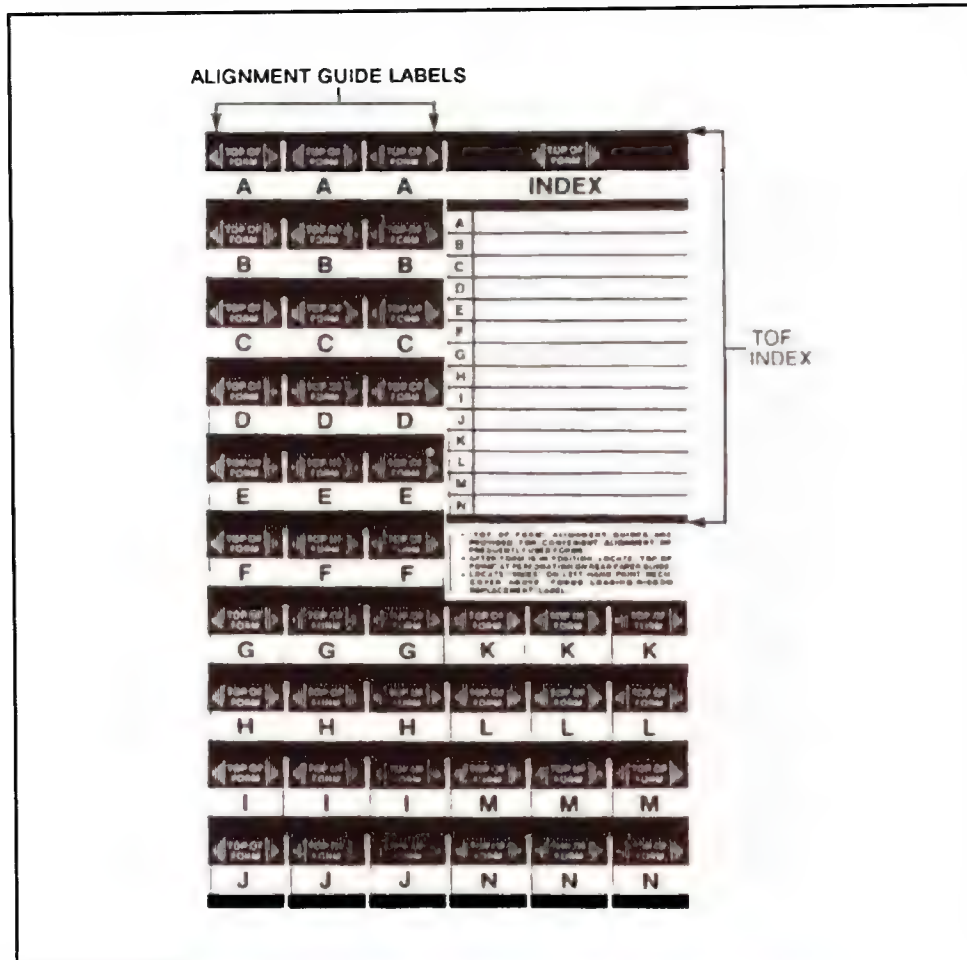


Figure 3-29. Top of Form Alignment Guide Labels

Installing the Top of Form Alignment Guide Labels

1. Position the index label.

Peel off the index label from the plastic sheet (Figure 3-30) and adhere it to the left hand print mechanism cover above the "Forms Loading/Ribbon Replacement" label.



Figure 3-30. Top of Form Index Label

Note



It is recommended that alignment guide labels be placed **only** on the upper viewing surface so that paper position can be viewed with the top cover closed. Do not place labels on the platen surface, under the paper.

2. Position the alignment guide labels.

After your form is in position, place an alignment guide label (A, B, etc.) next to the perforation on the rear paper guide (Figure 3-31). Make sure the label is positioned so it can be seen when using various paper sizes.

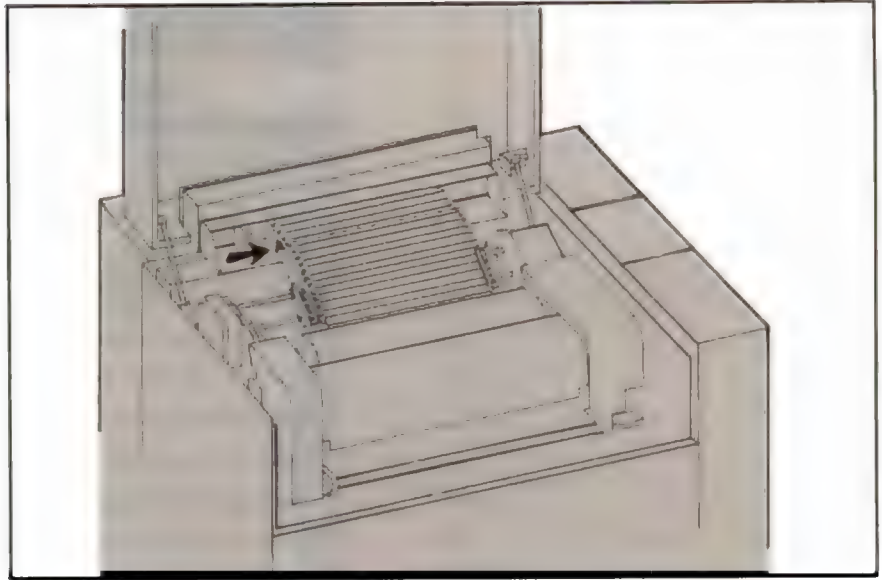


Figure 3-31. Positioning Alignment Guide Labels

3. Record information.

Write down form placement information on the index label (Figure 3-32).

INDEX		
A	BANK CHECKS	C
B	9.5 X 11 INVENTORY	D
C	CARD LABELS	A
D	INVOICE FORMS	E
E		
F		
G		
H		
I		
J		
K		
L		
M		
N		

RECORD *TOP* INFORMATION FOR FORMS BEING USED.

Figure 3-32. Recording Information on Index Label

Note



If form alignment information changes, record the new form placement on the index label.

USING THE POWERED PAPER STACKER

For optimum performance of your powered paper stacker, follow these instructions to correctly use the stacker and position your paper.

Note



An Operator Information Label is located on the inside panel of the powered paper stacker to provide brief instructions on how to use your stacking aid.

1. Open the stacker door.

Slide out the paper tray and place the chains behind the backstop (Figure 4-1).

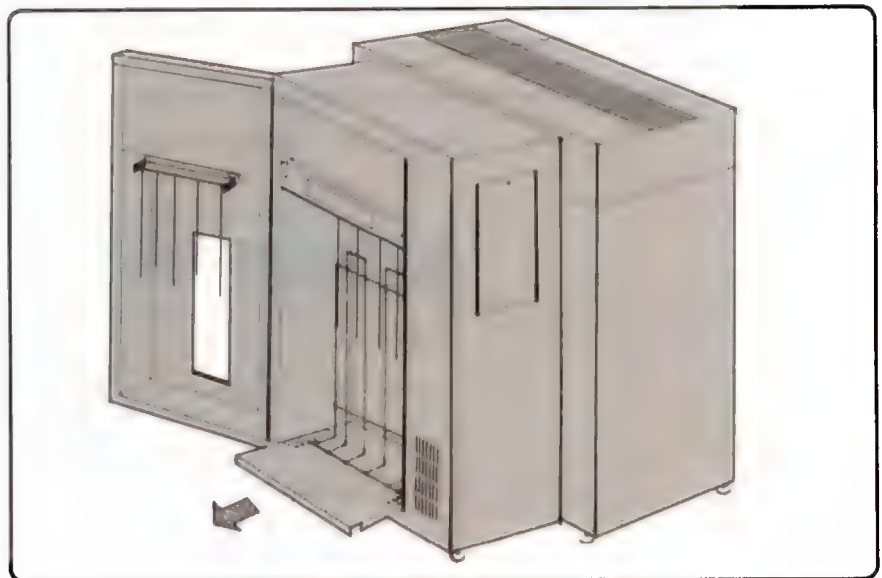


Figure 4-1. Sliding Out the Paper Tray

2. Position the backstop.

The two labels on the paper tray show you where to position the backstop for different paper sizes. Refer to Table 4-1 for the correct placement for your paper size and then install the backstop at the desired location on the paper tray (Figure 4-2).

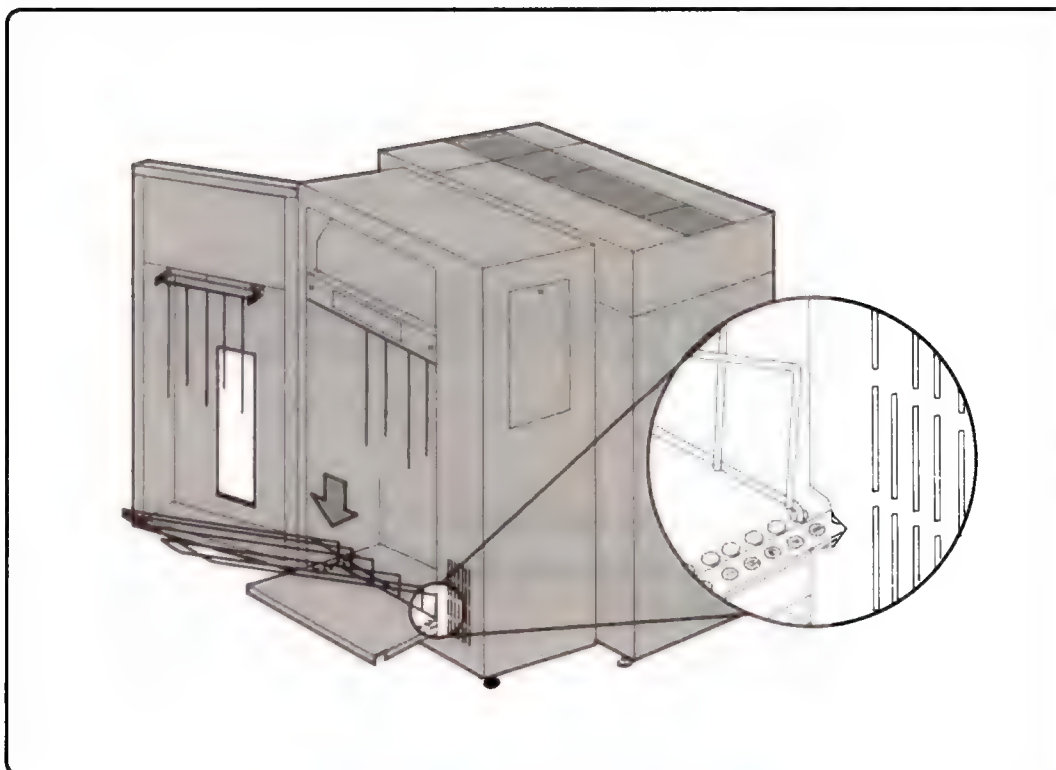


Figure 4-2. Positioning the Backstop

Table 4-1. Recommended Backstop Positions

Form Size (width x length)	Single Part	Multi-Part
14 $\frac{7}{8}$ x 12 inches	E	D
14 $\frac{7}{8}$ x 11 inches	E	E
9 $\frac{7}{8}$ x 11 inches	E	E
8 $\frac{1}{2}$ x 11 inches (3 hole)	E	E
11 x 8 $\frac{1}{2}$ inches	G	F
8 $\frac{1}{2}$ x 7 $\frac{1}{2}$ inches	I	H

3. Push in the paper tray.

Make sure the chains hang in front of the backstop (Figure 4-3).

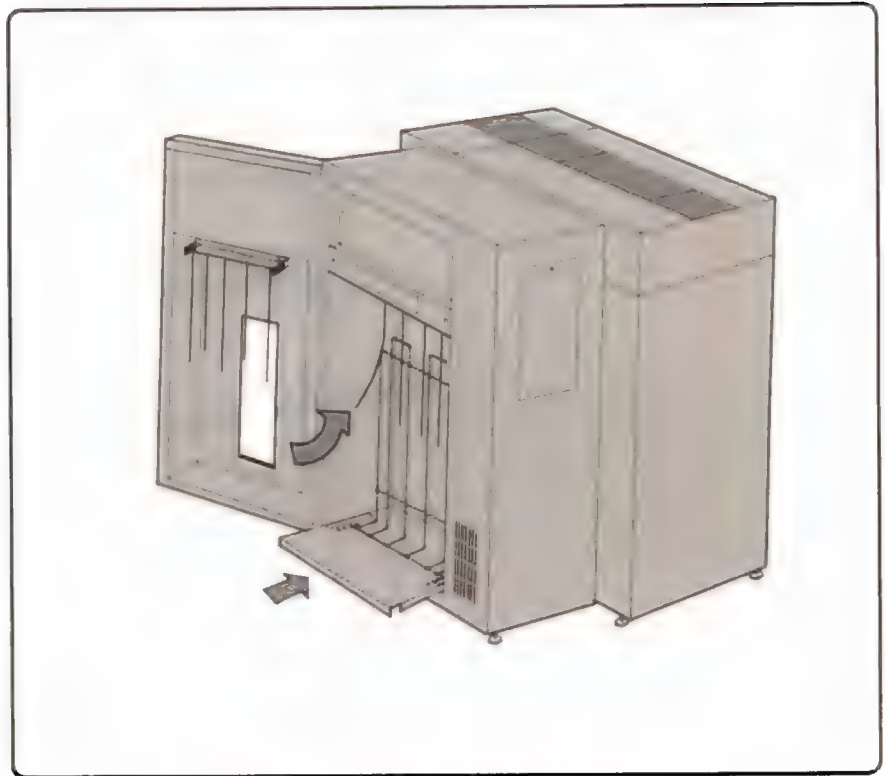


Figure 4-3. Pushing In the Paper Tray

4. Adjust the door chains.

Refer to Table 4-2 for the recommended position of the door chains for your paper size. (The Operator Information Label, inside the stacker, also diagrams door chain positions.) To install the chain assembly on the stacker door, turn the metal bar sideways to fit into the bracket; then, insert the chain assembly into the desired slot (Figure 4-4).

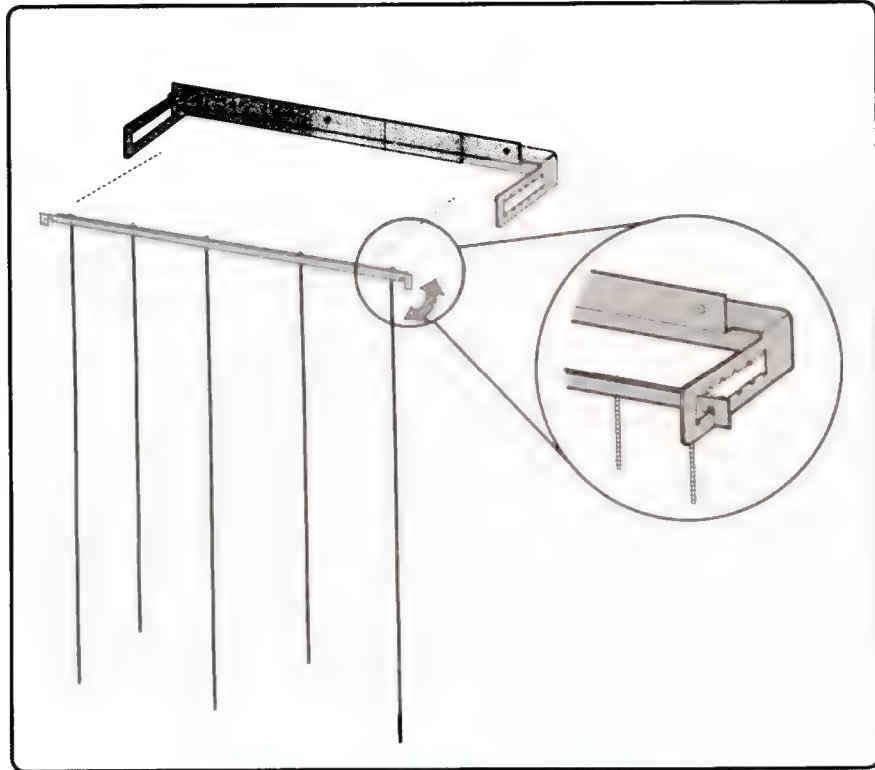


Figure 4-4. Adjusting Door Chains

Table 4-2. Recommended Door Chain Positions

Form Size (width x length)	Single Part	Multi-Part
14 $\frac{7}{8}$ x 12 inches	B	A
14 $\frac{7}{8}$ x 11 inches	C	A
9 $\frac{7}{8}$ x 11 inches	B	A
8 $\frac{1}{2}$ x 11 inches (3 hole)	B	A
11 x 8 $\frac{1}{2}$ inches	F	D
8 $\frac{1}{2}$ x 7 $\frac{1}{2}$ inches	F	E

5. Advance paper into the stacker.

Start your job to advance at least 10 sheets of paper onto the paper tray (make sure the first form feeds smoothly into the stacker without jamming).

6. Start the paper stack.

Make sure each form folds on the tray the same way as it came out of the input box (Figure 4-5).

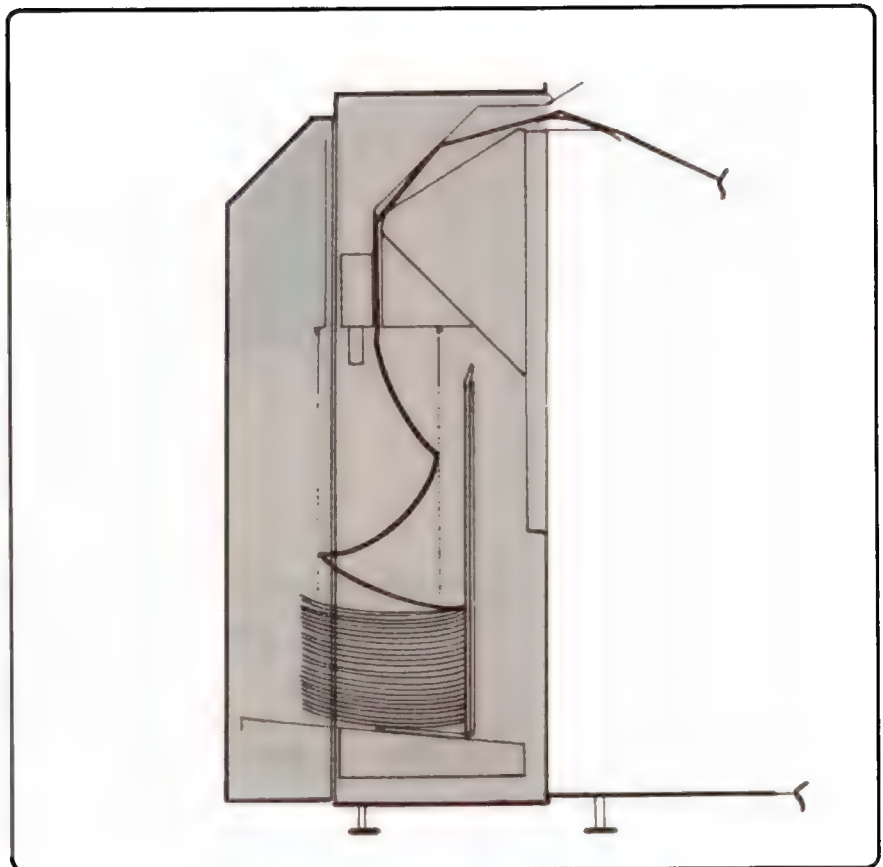


Figure 4-5. Starting the Paper Stack

Note



The performance of the stacker depends on the paper folding correctly. It is extremely important for the paper to fold the same way it was manufactured.

7. Align the paper stack.

Center the stack directly under the falling paper and then push it against the backstop (Figure 4-6). The backstop guides the paper into position and helps it fold correctly.

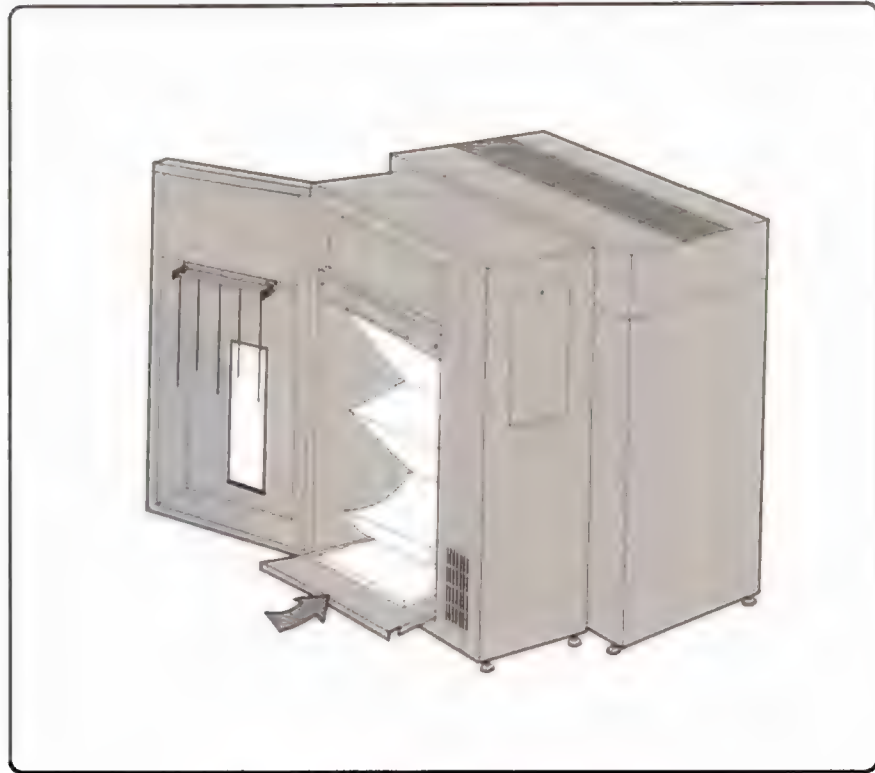


Figure 4-6. Aligning the Paper Stack

8. Close the stacker door.

Continue to page 4-7, “Unloading the Paper Stack,” for information on how to remove paper from the stacker.

Unloading the Paper Stack

When you run out of paper in the printer:

1. Advance paper into the stacker.

Put the printer "off-line" and press **FORM FEED** to advance the last sheets of paper into the stacker.

2. Remove the stack.

Slide the paper tray out and pick up the stack.

3. Close the stacker.

Push the tray back in and close the door.

When you finish one job and want to start another:

1. Put the printer "off-line."

Push the **ON LINE** button to take the printer "off-line."

2. Pull out the paper tray.

3. Remove your job.

Tear off the last sheet from your job and remove it from the paper tray.

4. Prepare the stacker for the next job.

Adjust the backstop and door chains for your next forms length.

5. Push the paper tray back in.

6. Push the **ON LINE key to put the printer turn the printer "ON."**

7. Start your new job.

Return to the stacker and make sure the forms are folding and stacking correctly.

8. Close the stacker door.

PRINTER CONFIGURATION

The HP2566C/HP2567C printer needs to be configured to perform various functions. Follow the procedure below, to configure your printer using the buttons on the Operator Control Panel.

Table 5-1 lists the configurable printer functions and their associated numbers. Each function has two or more possible parameters that can be selected as desired. Some of the functions can be set remotely via escape (ESC) sequences. See the *HP256X Printer Family Technical Reference Manual*, 02564-90905, for information about remote configuration. Also, use the Operator Information label, inside your printer, as a quick reference guide for the CONFIGURATION modes.

Setting Configuration Functions

Follow steps 1 - 4 to adjust and set CONFIGURATION modes from the Operator Control Panel.

1. Enter the CONFIGURATION mode.

Make sure the printer is "off-line." Press and hold down the **CONFIG.** key. At the same time, press either **FINE ADJ.** key to move to the desired function number (two decimal points indicate the CONFIGURATION mode).

2. Release the **CONFIG.** key.

The **parameter value** for the desired function number shows up in the display window.

Note



If you do not want to change the parameter, press the **CONFIG.** key a second time, or press the **ENTER** key, or press the **ON LINE** key. All these retain the original configuration for that function.

3. Set the parameter.

Use the **FINE ADJ.** keys to move to the desired parameter.

Note



Some configuration parameters can only be modified by a Hewlett-Packard Service Representative. In these cases, the **FINE ADJ.** keys have no effect.

4. Press **ENTER**

This sets the new parameter and the printer returns to the STATUS mode.

Table 5-1. Configuration Function Numbers

Function #	Description	Parameter Range	Comments
1	Select Primary Character Set	0-95	See pg. 5-3
2	Select Secondary Character Set	0-95	See pg. 5-3
7	Select Page Length Representation	0,1	See pg. 5-4
20-29*	Configure Interface	00-FF	See pg. 5-5
50	Disconnect Modem	0,1	See pg. 5-4
51	Difficult Forms Mode	0,1	See pg. 5-4
52	Horizontal Graphics Density	60,70	See pg. 5-4
60	Perforation Skip	0,1	See pg. 5-5
61	Display Functions	0,1	See pg. 5-5
80	Enable/Disable Label Card	0,1	See HP Label Card Manual 26062-90902
81	Printronix P-Series Line Feed Emulation	0,1	See HP Label Card Manual
85-89	Configure Label Card	00,FF	See HP Label Card Manual

* Functions 20-29 are dependent on which interface is installed (see your Interface manual)

Character Set Selection

To be compatible with both 7-bit and 8-bit hosts, your HP2566C/HP2567C has 7-bit and 8-bit character sets. The standard 7-bit sets are ASCII and Roman Extension. The standard 8-bit set is Roman8, combining ASCII plus Roman Extension characters. The printer may contain up to 16 character sets. Your printer contains the sets which were specified in your purchase order. Two character sets (primary and secondary) may be selected at any one time and are chosen either through the CONFIGURATION mode from the Operator Control Panel or remotely via escape sequences.

Primary Character Set: FUNCTION 1

Select the primary character set by accessing function number “1” of the CONFIGURATION mode and selecting the parameter associated with the desired primary character set. The character sets and their associated parameters are listed on your self-test print out. Figure 5-1 shows an example of the top portion of a self-test printout. The arrows in the figure point out the assigned character set parameter value. Note that the assigned values vary from printer to printer. Check your printer’s self-test to find the character set values.

Secondary Character Set: FUNCTION 2

Select a secondary character set from the printer's self-test. Access function number "2" of the CONFIGURATION mode and enter the parameter associated with that set (Figure 5-1).

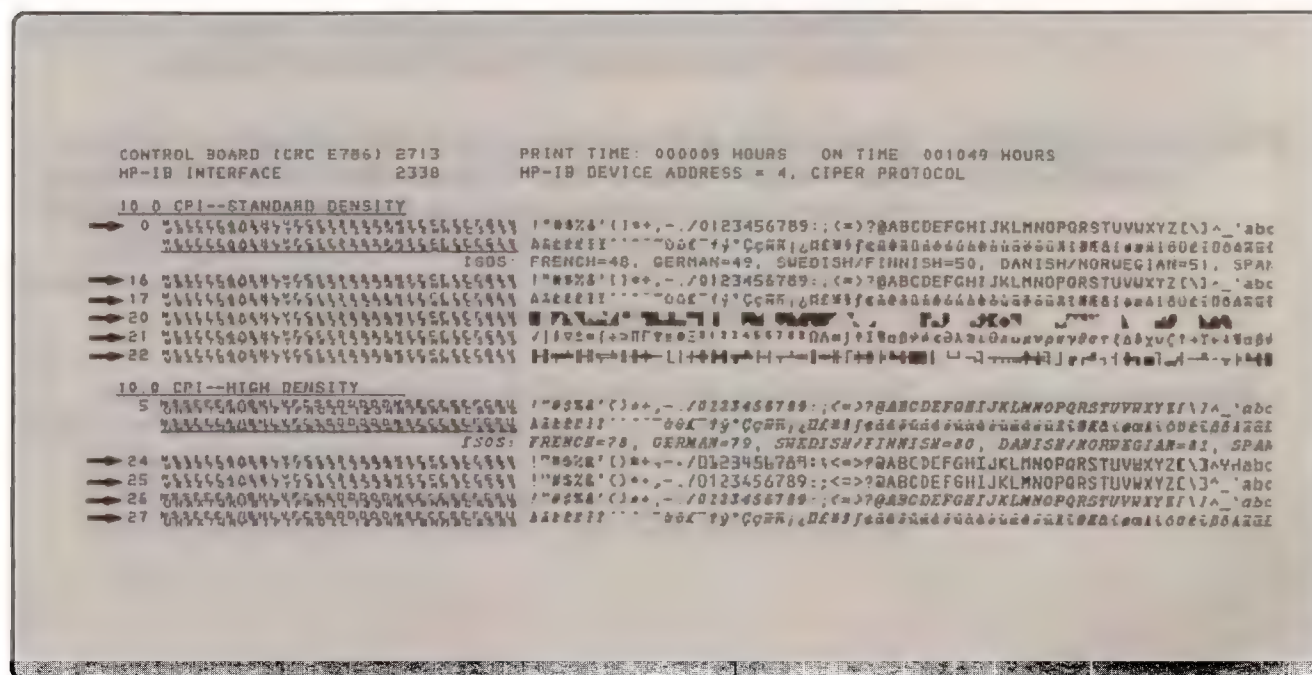


Figure 5-1. Character Set Self-Test Example

Remote Character Set

The character sets shown in your self-test printout may also be selected remotely if performed under program control. Character set selection commands override the Operator Control Panel configuration setting (except under power-on or reset conditions). When taken "off-line," the printer remains in the character set last commanded. See the *HP256X Printer Family Technical Reference Manual, 02564-90905*, for information on remote character set selection.

Standard ASCII SHIFT-IN and SHIFT-OUT codes may be used to select primary and secondary character sets. SHIFT-OUT selects the secondary set and SHIFT-IN returns the printer to the primary set. Any number of character sets may be used within one print line if they are the same pitch. Additionally, bar codes and line draw can be printed on the same line as 10 character-per-inch (cpi) character sets. (Compressed character sets and the double-high/double-wide character set cannot be printed on the same line with each other or with 10 cpi text.)

Select Page Length Representation: FUNCTION 7

Page length can be selected in either lines-per-page or in $\frac{1}{2}$ inch increments. Refer to "Adjusting Forms Length" on page 3-25 for instructions on how to set the CONFIGURATION mode.

Disconnect Modem: FUNCTION 50

If a serial interface is installed in the printer and is connected to a modem, it is possible to disconnect the modem from the printer's Operator Control Panel. Setting function 50 to parameter "1" and then pressing **ENTER** makes the Data Terminal Ready line to go to the "OFF" state for two seconds. If the modem Data Terminal Ready line is connected, this action should disconnect (hang-up) the modem.

Difficult Forms Mode: FUNCTION 51

Some complex multi-part forms such as statement mailers or invoices may result in a loss of the Top of Form position. If this problem occurs, the printer can be placed in a low speed, high torque mode by accessing function 51 of the CONFIGURATION mode and selecting parameter "1." Since this will affect throughput, make sure function 51 is set back to "0" when the high torque mode is not required.

Horizontal Graphics Density Selection: FUNCTION 52

Horizontal graphics density (60 or 70 dots per inch) is selected via function 52. There is not a parameter "1" or "0" for this function. Only 60 or 70 shows up in the display window. Programmatically setting the density overrides the operator control panel setting except under power-on or reset conditions. Default value is 70 dots-per-inch (dpi).

**Perforation Skip Mode:
FUNCTION 60**

When perforation skip mode is enabled (ON), an automatic page eject occurs when the perforation skip region is entered. This is to prevent printing too close to the page perforations. You can turn this automatic page eject "ON" by setting Perforation Skip Mode (function 60) to parameter "1" (ON). The default value is "0" (OFF). VFC control is not affected by perforation skip mode. For more information on perforation skip, refer to page 3-27.

**Display Functions
Mode:
FUNCTION 61**

Turn on the display functions mode by setting function 61 to parameter "1" (ON). In the display functions mode, the printer prints representative character symbols for the control code or escape sequence characters instead of actually executing the commands. For example, if the printer encounters the SHIFT-OUT command (to access the secondary font), the command will not be executed. The symbol S_O will be printed instead. Two exceptions to this are the carriage return command and the escape sequence to turn display function mode "OFF" (ESC Z). The carriage return control character will cause a C_R symbol to be printed and an actual carriage return and line feed to be performed. Function 80 must be set to parameter "1" if the display function mode is "ON." The default parameter for display functions mode is "0" (OFF).

Vertical Line Spacing

Vertical line spacing (6 or 8 lines-per-inch) is selected via the **L.P.I. ADJ.** key on the Operator Control Panel or by program control or escape sequences. Programmatically setting the line spacing overrides the Operator Control Panel setting except under power-on or reset conditions. Refer to page 3-28 for more information on setting LPI.

**Interface
Configuration**

All interface functions are programmed from the Operator Control Panel, however, your Hewlett-Packard Service Representative usually enters these numbers. **When the function numbers are entered, make sure you write them down for future reference.** There may be instances when these numbers need to be re-entered. Each interface has its own set of configuration parameters which are set by accessing functions 20 through 29 of the CONFIGURATION mode. If you need additional information, refer to the Interface manual shipped with your printer for configuration or cabling information.

Note



If your printer is equipped with an HP-IB interface, see page 5-6 for HP-IB Address Selection. If it is equipped with another interface, see the Interface manual shipped with your printer.

All interface functions (20 - 29) and their parameters must be entered. If you need to change the configuration or re-enter numbers, follow this procedure:

1. Enter CONFIGURATION mode.

Make sure the printer is "off-line." Press and hold down the **CONFIG.** key. At the same time, press either **FINE ADJ.** keys to move to the desired function (20 - 29). Two decimal points indicate the CONFIGURATION mode.

2. Release the **CONFIG. key.**

Find the parameter for the function (20 - 29) in the Interface manual that was shipped with your printer, or if you wrote down the configuration parameters when your interface was installed, use those parameters.

3. Set the parameter.

Use either **FINE ADJ.** key to move to the desired parameter number.

4. Press **ENTER**

This sets the new parameter and the printer returns to the STATUS mode.

5. Set the next parameter.

Repeat steps 1 through 4 until all the parameters for functions 20 through 29 are entered.

HP-IB Selection

When selecting an HP-IB address, use the same basic procedure as configuring other printer features such as character set selection and print density. To select an HP-IB address, follow this procedure:

1. Enter CONFIGURATION mode.

Make sure the printer is "off-line." Press and hold down the **CONFIG.** key. At the same time, press either **FINE ADJ.** key to move to function 20. The two decimal points indicate the CONFIGURATION mode.

2. Release the **CONFIG. key.**

The current HP-IB address shows up in the display window.

3. Set the parameter.

Use the **FINE ADJ.** keys to move to the desired address (0-7).

4. Press **ENTER**

This sets the new address and the printer returns to the STATUS mode.

Note



The HP-IB cable loading is set at the factory to match a single cable length appropriate for the interface option selected. To match the HP-IB loading to a different length cable, call your Hewlett-Packard Service Representative.

Test

A self-test is used to verify the printer's operational status. This self-test function can either be run from the Operator Control Panel or remotely using escape sequences. See the *HP256X Printer Family Technical Reference Manual, 02564-90905*, for details. You can run the standard self-test or choose a specific sub-test (individual sub-tests can only be executed from the Operator Control Panel). It is also possible to have the standard self-test or any of the sub-tests run continuously.

The printer must be "off-line" ("on-line" light not illuminated) to execute a self-test from the Operator Control Panel. If any error number appears in the display window, the self-test will not print.

Standard Self-Test

To perform the standard self-test (excluding interface tests), depress the **TEST** key once to enter the TEST mode and then press **ENTER** to begin the test. To run a continuous standard self-test, press and hold down the **TEST** key for more than two seconds (until the number "4" appears in the display) and then press **ENTER**. You can exit a self-test any time by pressing either the **TEST** or **ON LINE** key.

Note



After you press the **TEST** key to start a self-test, it takes a few seconds before the printer starts to print. While the self-test is running, the right decimal point blinks in the display window.

In the back of this manual there is a simulated copy of a standard two-page self-test printout. This printout lists power-on time and print time in hours; interface configuration information; the date code of some printed circuit assemblies; all the printer's installed character sets, bar codes and graphics; and various characters to check print quality. The graphics part of the self-test is printed in the density set from the Operator Control Panel.

When the test is complete and there are no errors, the printer returns to the STATUS mode. If an error occurs during the test, an error number flashes in the display window. Refer to page 5-9, "Test Failure," for more information.

Continuous Test

To run a continuous self-test, press the **TEST** key and hold it down for more than two seconds until the display changes from "5" to "4." Release the **TEST** key and press **ENTER**. The self-test will run continuously. Exit the continuous test by pressing the **TEST** or **ON LINE** key.

Specific Sub-test Selection

Individual sub-tests can be selected and run from the Operator Control Panel. Table 5-2 lists the sub-tests available for your printer. To run a sub-test, press the **TEST** key to enter the TEST mode. A sub-test number appears in the display window and the right decimal point lights up indicating that the printer is in the TEST mode. Use either **FINE ADJ.** key to move to the desired sub-test number. Once the number is displayed, press **ENTER** to start the sub-test.

Table 5-2. Sub-Test Numbers

Sub-Test	Numbers
Standard Self-Test	0
Standard Ripple Print	1
Double Size Ripple Print	2
Compressed Ripple Print (16.7 cpi)	3
High Density Ripple Print (optional)	4
Raster Graphics (herring bone)	5
High Density Raster Graphics (herring bone)	6
Printer Configuration print-out	8
900/1200 LPM Ripple Print (upper case)	9
High Speed Draft Ripple Print (upper case)	10
Flight time/forms thickness adjust patterns	15
Interface tests	30-38
Graphics tests (if installed)	40-48

Example of a Continuous Sub-Test

To continuously run the “Standard Ripple Print” sub-test, follow the proceeding instructions:

1. Enter CONTINUOUS TEST mode.

Press the **TEST** key and hold it down for more than two seconds until the displayed number “5” changes to “4.” Release the **TEST** key.

2. Select the Ripple Print sub-test.

Press either **FINE ADJ.** key until number “1” is displayed.

3. Press ENTER

This begins the sub-test. Unless an error occurs, the sub-test will run continuously. Press the **TEST** key to stop the sub-test or **ON LINE** to return control of the printer to the host.

Test Failure

If there is a problem with the printer, an error number flashes in the display window. Error numbers indicate the general area in the printer where the failure occurs. If your printer fails the self-test, refer to Chapter 7 for a description of error codes or the Operator Information Label inside your printer.

USING THE PRINTER

This chapter explains the various features of your printer: status mode, Operator Control Panel, indicator lights, and print quality.

Your printer is controlled either through the Operator Control Panel, control codes or escape sequences. This manual only explains the Operator Control Panel. Refer to the *HP256X Printer Family Technical Reference Manual*, 02564-90905, for information on control codes.

Printer Modes

The HP2566C/HP2567C printer operates in four modes: STATUS, TEST, CONFIGURATION, and SET TOP OF FORM. Decimal points show up in the display window to indicate the mode (Figure 5-1).

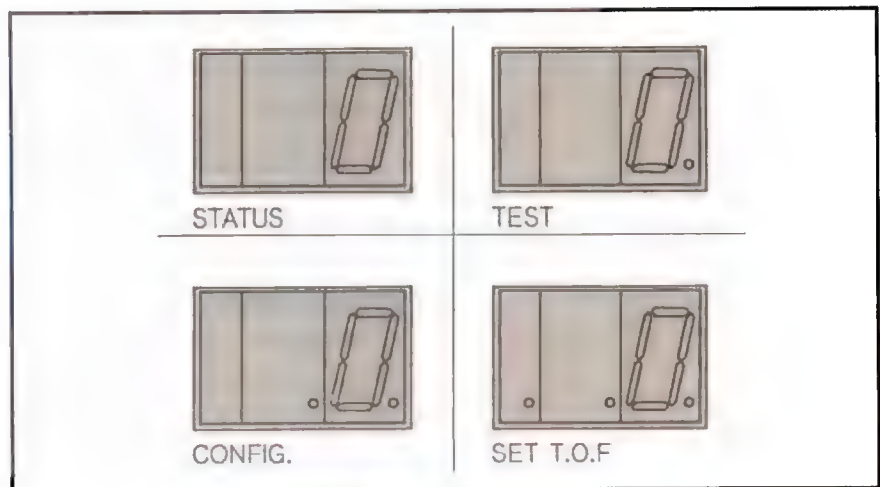


Figure 6-1. Display Modes

The numbers that display in each mode are listed in these sections of the manual: "Printer Status" (page 6-2), "Test" (page 5-7), "Printer Configuration" (page 5-1), and "Adjusting Top of Form" (page 3-30).

Printer Status Mode

Under most conditions, the printer is in the STATUS mode and displays its current status in the Operator Control Panel display window. When in the STATUS mode, none of the decimal points on the display are illuminated but a status number is displayed. This number corresponds to a specific status described in Table 6-1.

Note



When the printer is in the SET TOP OF FORM mode, printer status is still displayed, but all three decimal points are illuminated.

Table 6-1. Status Codes

Status Code	Description
0	Printer ready (also modem disconnected or serial interfaces)
1	Printer ready, modem connected (serial interface)
2	Silent run—data recovery for HP-IB interfaces on HP 3000
4	Performs a sub-test in continuous mode (continuous test active)
5	Performs a single pass sub-test (single test active)
6	Print One Line (file data) activated
7	Print One Line (test pattern) activated
Operator Correctable Problems	
10	Swing-gate open
11	Printer out of paper
12	Ribbon jam
13	Paper jam
Error numbers 14 through 91 indicate run time or self-test errors and are explained in Chapter 7.	

Operator Controls and Indicators

This section explains the location and function of the printer controls and indicators.

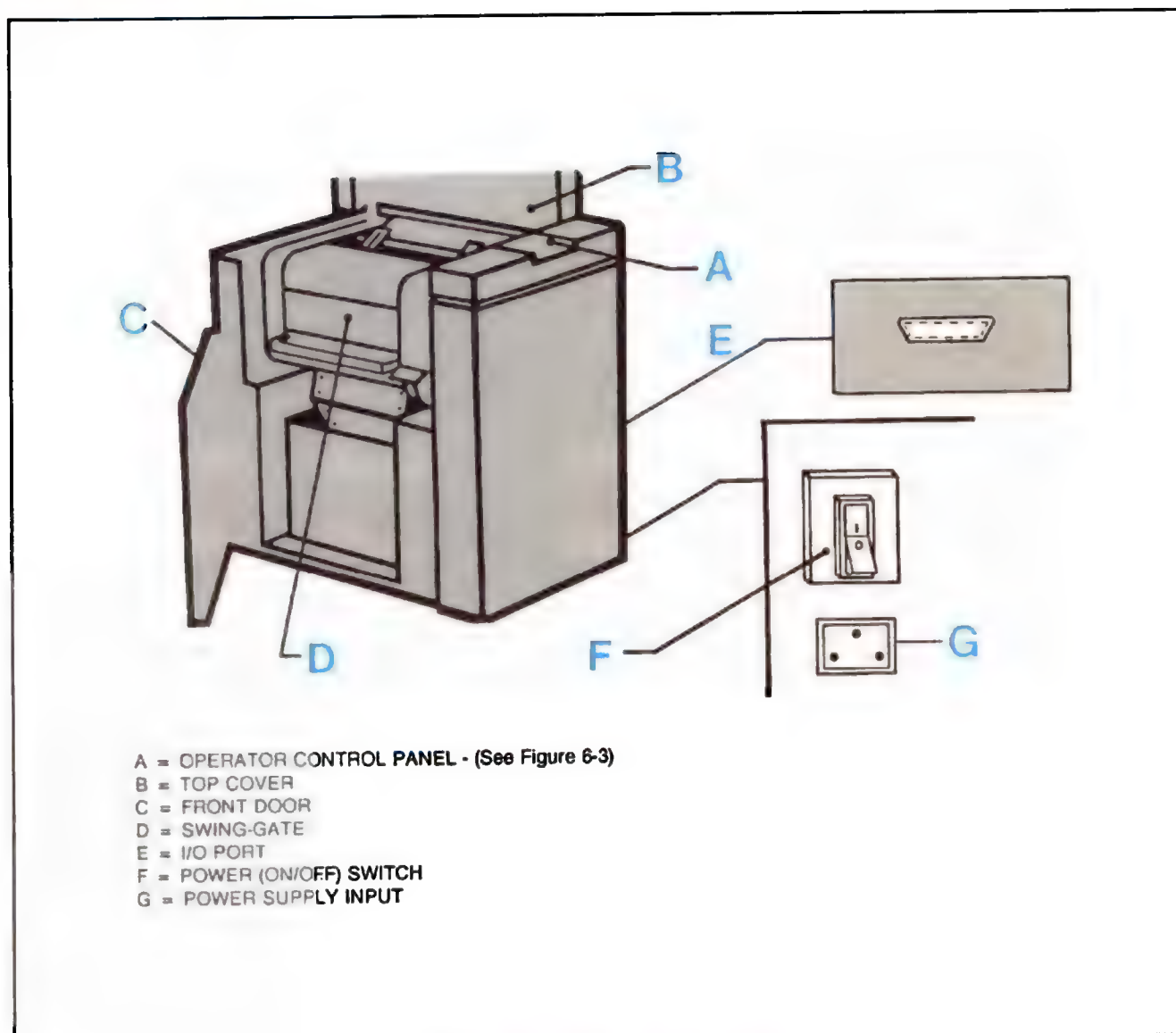


Figure 6-2. Parts of the Printer

Figure 6-3 shows the keys on the Operator Control Panel.

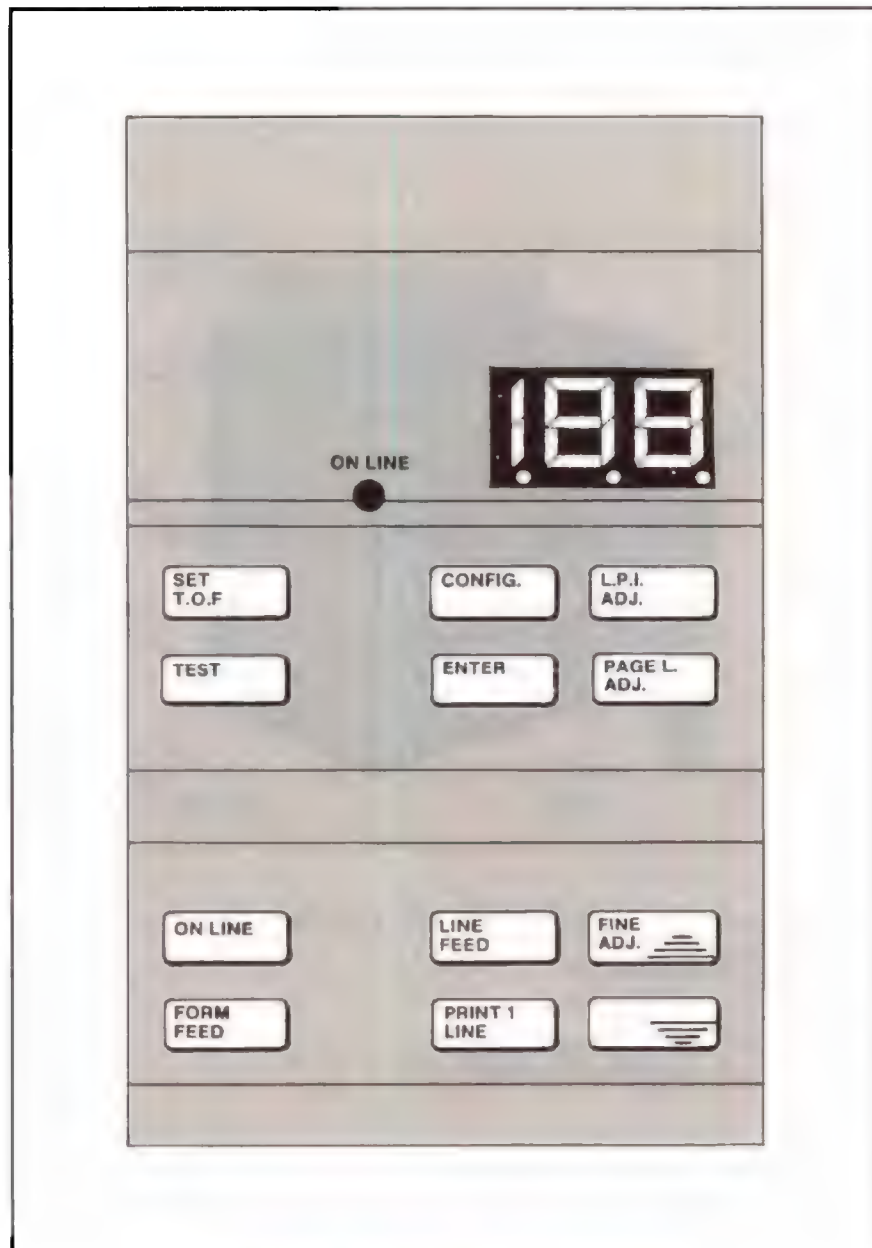


Figure 6-3. Operator Control Panel

ON-LINE INDICATOR

This yellow dot lights up in the display window when the printer is “on-line.” When the **ON LINE** key is pressed, control of the printer is turned over to the host and all other keys are disabled. The operator no longer controls the printer, the computer does.

DISPLAY WINDOW

The display window is located on the top portion of the Operator Control Panel (refer to Figure 6-3). The numbers that display in the window convey information for the different modes: STATUS, TEST, CONFIGURATION, and SET TOP OF FORM. The decimal points indicate which mode the printer is in: no decimals are present when you are in the STATUS mode; the right decimal shows up when you are in the TEST mode; the middle and right decimals show up when you are in the CONFIGURATION mode; and all three decimals show up when you are in the SET TOP OF FORM mode.

Usually the printer is in the STATUS mode and displays a number indicating what the printer is doing. Refer to Table 6-1 for status code numbers and their descriptions.

When in the TEST mode, the number in the display window is the number of the sub-test that you want to run. When a test is running, the right decimal point blinks. (Refer to page 5-7 for more information on the TEST mode.)

When you want the printer to perform different functions (change character sets, turn perforation skip “ON” or “OFF”, etc.) you must be in the CONFIGURATION mode. (Refer to page 5-1 for more information).

In the TEST and CONFIGURATION modes, you can change the numbers in the display by using the up and down **FINE ADJ.** keys.

For information on how to SET TOP OF FORM, refer to page 3-30.

SET TOP OF FORM KEY:

SET T.O.F.

This key sets the first line of print on your page. When pressed, all three decimal points light up in the display window indicating the SET TOP OF FORM mode. Refer to page 3-30 for details on operation of this key. If you want to exit this mode without making changes, press the **SET T.O.F.** key once again to return to the STATUS mode, or the **ON LINE** key to return the printer to host control.

If a paper jam error occurs, press **SET T.O.F.** then **ENTER** to clear it. A "0" will show in the display window, however, the error will be displayed again if the condition is not corrected before exiting the mode. To clear a paper jam error, press the **SET T.O.F.** key. See "Adjusting Top of Form" on page 3-30 for more information.

CONFIGURATION KEY:

CONFIG.

This key, in conjunction with the **FINE ADJ.** keys, lets you enter the CONFIGURATION mode. The CONFIGURATION mode is where you program the printer to perform various functions (interface configuration, page length representation, select character sets, etc.). Pressing the **CONFIG.** key alone will do nothing.

When the **CONFIG.** key is held down, a function number is displayed. This number can be changed by using either **FINE ADJ.** key to move to a new number. The middle and right decimal points light up to indicate that you are in this mode. When the **CONFIG.** key is released, the parameter associated with the function just displayed appears in the display window. If you wish to change parameters, use either **FINE ADJ.** key again to select a new parameter. Press **ENTER** to store the new parameter and exit the CONFIGURATION mode.

If you do not want to change any parameter, press the **CONFIG.** key a second time and the printer returns to the STATUS mode. You can also press the **ON LINE** key to return the printer to host control.

For more information on printer configuration, refer to page 5-1.

LPI ADJUST KEY:

L.P.I. ADJ.

Pressing this key shows the printer default LPI (lines-per-inch) setting (6 or 8) in the display window. Since LPI is a function you can select, two decimal points light up indicating you are in the CONFIGURATION mode. Lines-per-inch can only be set to 6 or 8. Press either **FINE ADJ.** key to toggle between the two settings. When the desired setting is displayed, press the **ENTER** key to store the value. If you do not want to change the LPI setting, press **ENTER** to return to the STATUS mode or the **ON LINE** key to turn control over to the host. One additional note is that **this setting may be overridden by escape sequences**. For more information on setting LPI, refer to page 3-28.

TEST KEY:

TEST

Press this key to enter the TEST mode where you can select sub-tests to check printer performance. To run a sub-test, press **TEST**, find the desired sub-test with either **FINE ADJ.** key, and then press **ENTER**. The sub-test will begin to print. Test failure is indicated by a flashing error number in the Operator Control Panel display window. A detailed description of the test function is presented on page 5-7.

ENTER KEY:**ENTER**

When in the CONFIGURATION mode, pressing the **ENTER** key stores the selected parameter. When the **ENTER** key is pressed in the TEST mode, the printer starts running a test. In the SET TOP OF FORM mode, pressing the **ENTER** key sets the new Top of Form (then the printer returns to the STATUS mode).

**PAGE LENGTH
ADJUST KEY:****PAGE L. ADJ.**

This key displays the physical forms length in either physical text lines-per page, or in $\frac{1}{2}$ inch increments. Although the printer is in the CONFIGURATION mode, usually one decimal point lights up (for example, 11.5 for 11 $\frac{1}{2}$ inches). You can adjust the forms length setting by pressing either **FINE ADJ.** key to select the value, then press **ENTER** to store it and return to the STATUS mode. Refer to page 3-25 for more information on adjusting forms length. If you use programmable VFC to set the page length, the page length setting on the panel must match the VFC setting, otherwise the printer will not properly sense paper-out.

ON LINE KEY:**ON LINE**

This key gives control of the printer to the operator ("off-line") or to the computer system ("on-line"). A yellow dot lights up in the display window when the printer is "on-line." The keys on the Operator Control Panel only work when the printer is "off-line." Press **ON LINE** to exit from the CONFIGURATION, TEST, SET TOP OF FORM, LPI Adjust and Page Length Adjust modes. The printer saves the previous configuration and Top of Form setting, and turns control over to the host. Pressing **ON LINE** when running a self-test aborts the test and turns control over to the host. The printer will not go "on-line" if there is an error condition present.

LINE FEED KEY:**LINE FEED**

When the **LINE FEED** key is pressed, the printer advances to the next print line. If you hold down the key, the printer pauses momentarily then advances paper at an increased rate. As long as you hold down the key, it will advance paper. The **LINE FEED** key functions only when the printer is "off-line" and will not work in the CONFIGURATION or TEST mode.

FORM FEED KEY:**FORM FEED**

This key advances the paper to the next Top of Form position. If pressed once, the printer moves one form feed. If you hold down the key, the printer performs continuous form feeds. This key functions only when the printer is "off-line" and will not work in the CONFIGURATION or TEST mode.

PRINT 1 LINE KEY:

PRINT 1 LINE

This key prints one line of data on the installed form at the current line position. If you hold down the key, the printer prints continuous lines of data.

Note



If you print a single line and want to look at it, press the line feed key to advance the paper so that the line is visible. This is not necessary when printing multiple lines.

The **PRINT 1 LINE** key produces different data depending on the printer mode. If the printer is in the TEST mode and you press **PRINT 1 LINE**, status mode 7 displays and a test pattern prints that aid forms alignment. If the printer is not in the TEST mode, the printer goes “on-line” momentarily, displays status mode 6, prints one line of data, then returns “off-line.” If no data is available from the interface or host within 1 $\frac{1}{2}$ seconds, the printer returns “off-line” without printing.

FINE ADJUST (UP/DN) KEYS:

FINE ADJ.

The two **FINE ADJ.** keys move the paper up or down in small increments. When either key is held down, the printer keeps moving the page until the key is released. The keys are also used to increment (up) and decrement (down) the numbers in the display window when in the TEST, CONFIGURATION, LPI Adjust and Page Length Adjust modes.

FORMS LOADING CONTROLS

Vertical Paper Tension Lever

This lever (Figure 6-4, A) is used to make minor adjustments in vertical paper tension by slightly changing the distance between the upper and lower tractors. Moving the lever upward decreases paper tension and moving the lever downward increases paper tension. This control allows you to adjust the paper to move smoothly through the tractors. For more information, refer to page 6-14, “Optimizing Print Quality.”

Tractor Control Knob

This knob, located to the right of the tractors, controls which tractors move when the tractor control keys are pressed (Figure 6-4, B). When the knob is in the PRINT AND FORMS ALIGNMENT POSITION (left), all four tractors can move. When the knob is set in the FORMS WIDTH ADJUST POSITION (right), only the right tractors move.

Set the knob in the PRINT AND FORMS ALIGNMENT POSITION when printing and when aligning the position of column 1. Set the knob in the FORMS WIDTH ADJUST POSITION when changing the position or adjusting the horizontal tension of the paper.

Tractor Control Keys

There are two sets of tractor control keys. The main set is located to the right of the tractors and is only accessible when the swing-gate is opened (Figure 6-4, C). The auxiliary tractor control keys are located on the right of the swing-gate and accessible when the swing-gate is closed (Figure 3-20, B)

Both sets of keys are used in combination with the tractor control knob to determine how the tractors move. The auxiliary set is identical in function to the main set but do not contain a middle (FAST) key.

Pressing the left or right key causes the tractors to move left or right respectively. The middle key, when pressed with the left or right key, causes the tractors to move at a faster rate. The tractor control knob setting determines whether all four tractors or just the two right tractors move when the tractor control keys are pressed.

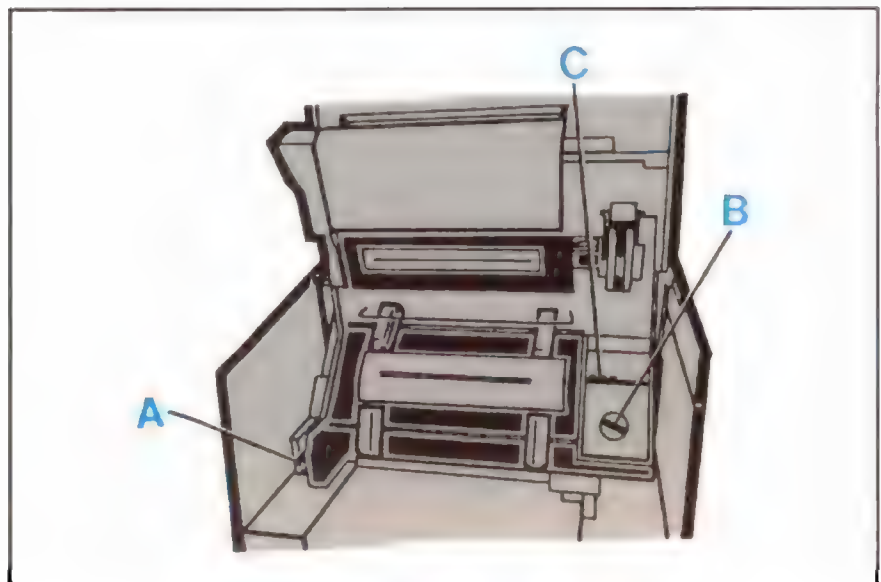


Figure 6-4. Forms Loading Controls

Forms Thickness Adjustment Lever

This lever, located under the access cover on the right front of the printer (Figure 6-5), is used to adjust the printer for maximum print quality with various thicknesses of paper and forms. Next to the lever are printed letters from “A” (minimum form thickness) to “N” (maximum form thickness).

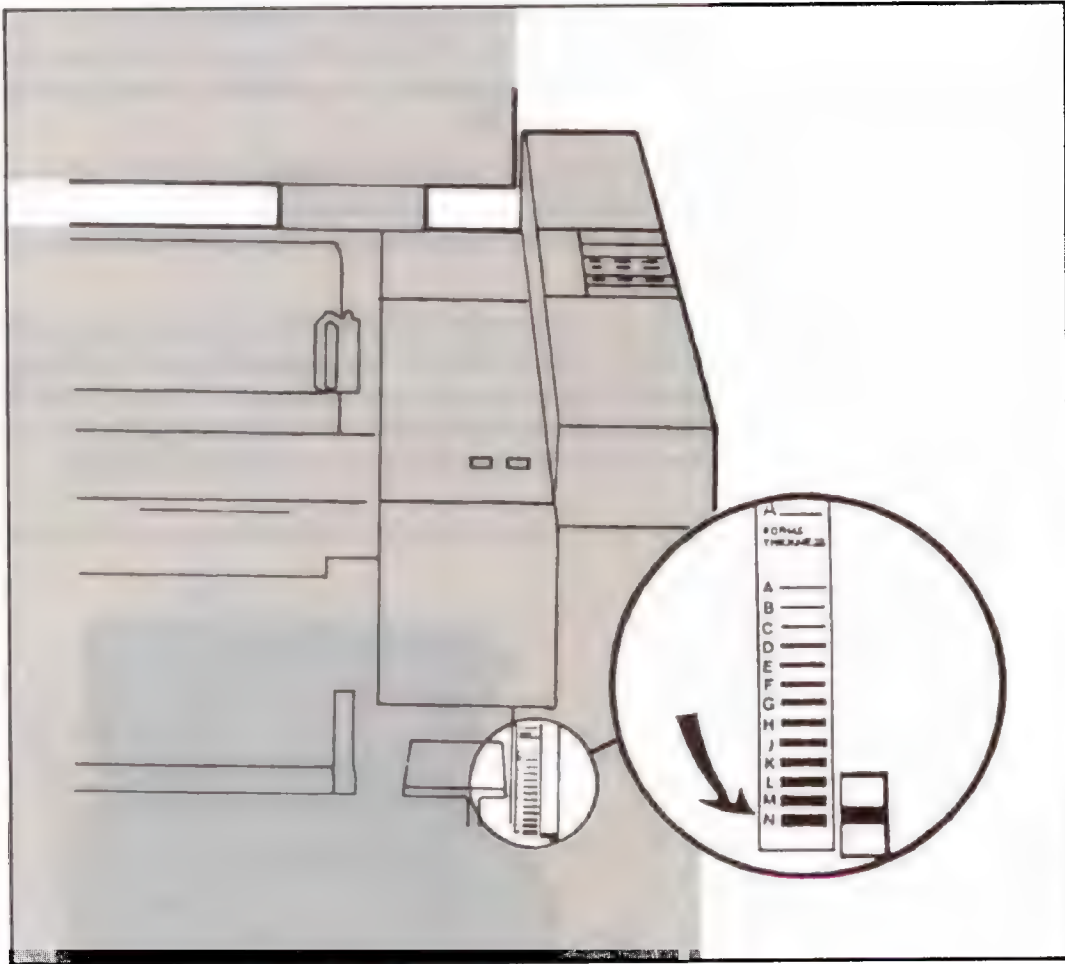


Figure 6-5. Forms Thickness Adjustment Lever

For further information on how this adjustment works, see “Adjusting Forms Thickness” on page 3-21 and “Optimizing Print Quality” on page 6-14.

Power-On Parameters and Power-Fail Recovery

The HP2566C/HP2567C printer has no power fail indicator. When the main power ON/OFF switch (back of printer) is toggled "OFF" and "ON" or a loss of power to the printer occurs, some of the printer's configuration settings are retained in non-volatile memory, and some are returned to defaults. (The numbers in parenthesis are configuration functions. Refer to Table 5-1.)

Values Retained In Printer Memory:

When power is restored to the printer, the following configuration settings return to the same state as before the power-off condition:

- On/Off-line in the same state as before losing power
- Primary and Secondary Character Sets stay selected as configured from the Operator Control Panel (1,2)*
- Vertical Line Spacing (6/8 LPI) stays as selected from the Operator Control Panel*
- Page Length representation as selected from the Operator Control Panel (7)*
- Interface Configuration (20-29)**
- Enable/Disable Label Card (80)**
- Printronix P-Series Linefeed Emulation (81)*
- Graphics Horizontal Density (52)*
- Perforation Skip (60)*
- Difficult Forms Mode (53)**

Values Returning to Default State:

Following a power-off state, these printer functions revert to the following conditions:

- Paper moves to the next Top of Form position
- Print buffer clears
- Standard VFC channel assignments selected*
- Left margin offset at zero*
- Display functions off (61)*

*these configuration settings **do not** affect printer communications but may vary the appearance of printer output.

these configuration settings **affect printer communications and should be verified anytime communication problems occur.

The recoverability of the HP2566C/HP2567C printer following a power failure depends on which system the printer is connected to. When using an HP-IB interface on some systems, the printer will display the number "2" (silent run) and may take several minutes to recover the job to the point where the power-fail occurred. **DO NOT DISTURB THE JOB OR PRINTER!** Recovery time varies with the size of the job and the system load. Refer to the appropriate system manual for more information on this subject. If only the printer loses power, the power-on parameters will be set as indicated on the previous page.

Reset The reset operation causes the printer to default to the power-on parameters as explained above. It is intended to be used only in the case of a self-test error or by a Hewlett-Packard Service Representative.

Reset is performed by pressing the **FORM FEED** and **L.P.I. ADJ.** keys together. When reset, the printer moves paper to the Top of Form, reverts to the power-on parameters, and stays "off-line." A programmable reset can also be performed which affects the printer similarly except that the printer remains "on-line."

More information about the programmable reset is found in the *HP256X Printer Family Technical Reference Manual 02564-90905*.

On-Line/Off-Line When the printer is "on-line," data and commands can be transmitted to it from a controlling device or host (computer system). When it is "off-line," data and commands from the controlling device are ignored by the printer. The printer must be "off-line" in order to use any key other than **ON LINE** on the Operator Control Panel.

The printer is placed "on-line" and "off-line" by pressing the **ON LINE** key on the Operator Control Panel. Fault conditions such as paper out, platen open, etc. cause the printer to turn "off-line." When this happens, the printer will not return "on-line" until the error has been corrected and the **ON LINE** key is pressed.

Graphics Printing

The HP2566C/HP2567C printer raster graphics printing capability is escape sequence driven. Consult the *HP256X Printer Family Technical Reference Manual, 02564-90905*, for graphics printing information.

The HP2566C/HP2567C printer also offers optional QMS Magnum printing capabilities. Refer to the *HPLabel Card Installation and Operator's Manual, 26062-90901*, for further information.

Vertical Forms Control

Vertical Forms Control (VFC) allows the user to skip to a predefined line on a page of print with only one command instead of using a number of line feeds. This capability can greatly increase the speed of a print job.

Your printer is equipped with a standard and a programmable VFC. When the printer is powered-up or reset, it defaults to the standard VFC.

The standard VFC contained in the HP2566C/HP2567C printer is a computed VFC, meaning that the VFC automatically adjusts its skip lengths when the form length is changed. The standard VFC channel definitions are listed in the following table. The terms "Top of Form" and "Bottom of Form" refer to the top and bottom of text on the page. More information about the programmable VFC is found in the *HP256X Printer Family Technical Reference Manual*, 02564-90905.

Table 6-2. VFC Channel Definitions

VFC Channel	Channel Definition
0	Conditional Top of Physical Page
1	Top of Form (line 1)
2	Bottom of Form (BOF) last
3	Single space (lines 1, 2, 3, 4...)
4	Double space (lines 1, 3, 5, 7...)
5	Triple space (lines 1, 4, 7, 10...)
6	Half Form
7	Quarter Form
8	Tenth space (lines 1, 11, 21, 31...)
9	Bottom of Form
10	BOF - one line (BOF - 1)
11	TOF - one line (TOF - 1)
12	Top of Form
13	Seven space (lines 1, 8, 15...)
14	Six space (lines 1, 7, 13...)
15	Five space (lines 1, 6, 11...)
16	Four space (lines 1, 5, 9, ...)

Optimizing Print Quality

There are two printer controls that are used to achieve the best print quality from your printer: the vertical paper tension lever (Figure 6-4, A, page 6-9) and the forms thickness adjustment lever (Figure 6-5, page 6-10).

To adjust the printer for optimum print quality:

1. Adjust the vertical tension.

With the swing-gate open and paper loaded, pull out the spring plunger knob and move the vertical paper tension lever downward until the paper is slightly taut against the platen. Insert the plunger into the selected slot. (The platen is the curved black surface lying between the upper and lower tractors.) Place your hand on the paper in the region of the platen and gently push the paper up and down. If the paper has significant freedom to move, the vertical tension is still too loose. When the tension is correct, there will be no vertical looseness.

2. Form feed the paper through the tractors.

With the printer “off-line,” press the **FORM FEED** key two or three times to ensure that the paper moves freely over the platen. Excessive paper tension causes the tractor holes in the paper to stretch and extreme tension causes a paper jam. If either of these conditions happen, pull out the spring plunger knob and lift the vertical paper tension lever one position at a time, pressing the **FORM FEED** key each time to check the tension.

Note



If the vertical paper tension lever is not adjusted correctly, some characters such as O's, and E's may appear squashed or flattened at the top. This may appear very evident especially when using heavy paper or 6-part forms. (See page 7-4 for an example of Character Scrunch). Proper adjustment of the lever solves this problem.

For normal print:

1. Run sub-test 15.

Close the swing-gate and run sub-test 15; a set of vertical and horizontal lines (see page 5-8 for sub-test procedure).

2. Adjust the forms thickness.

Use the **FORM FEED** key to eject the page. Examine the print. The vertical lines should be straight. If they are somewhat jagged, with the individual dots offset to the right and left, this is called “dot slalom” (Figure 6-6). Dot slalom signifies that the print gap is too large (the larger the letter, the wider the print gap). Decrease the Forms Thickness setting one position and run sub-test 15 again. When the printer is adjusted correctly, the vertical lines will be straight up and down.

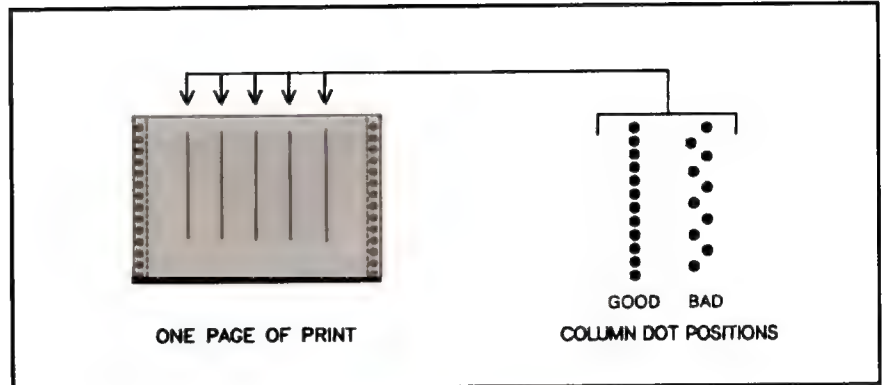


Figure 6-6. Dot Slalom

If the gap between the paper and the platen is too small, ink may smudge on the paper. If this happens, pull out the spring plunger knob, move the lever one position towards the maximum thickness setting “N,” and release the knob. Run sub-test 15 again until the smudging clears. The best adjustment is to set the print gap as tight as possible without ink smudging.

For draft quality print:

1. Run sub-test 10.

Close the swing-gate and initiate sub-test 10, which prints one page of ripple print (see page 5-8 for sub-test procedure).

2. Adjust the forms thickness.

Decrease the forms thickness setting toward "A" to obtain optimum print quality. Adjust the setting until print quality is correct.

Note



Draft character sets require a smaller forms gap than the standard character sets. In addition, forms tension is much more critical and requires extra care to assure proper setting.

Note



The draft character set increases the throughput of the HP2567C from 1200 to 1600 lines-per-minute (lpm) and the HP2566C from 900 to 1200 lpm. It does this by printing characters that are 5 dots high and 4 dots wide in the same space that the standard symbol set prints a character 7 dots high and 5 dots wide. In most cases, the dots in the vertical direction will not be connected. This is fundamental to the design, not an indication of improper adjustments on the part of the operator or field service personnel.

Preventive Maintenance

Maintain the printer in a state of general cleanliness. Accumulated dust, bits of paper, and lint can lead to serious problems.

Watch for indications of physical damage and report problems or potential problems to your Hewlett-Packard Service Representative.

IN CASE OF DIFFICULTY

You should not attempt to perform any maintenance on this printer except routine operator maintenance and limited maintenance of the print mechanism. However, if the printer does not function properly, there are some things you can do before scheduling a service call:

- **Is an error number displayed?** The HP2566C/HP2567C printer signals an error condition by flashing an error code number in the display window. If a number is displayed, refer to the following:
 - Error numbers 11 through 13: These are operator correctable errors. Refer to “Printer Errors” on page 7-5.
 - Error numbers 14 through FF: These are non-operator correctable errors. Refer to page 7-6 before calling the Hewlett-Packard Service Representative.
- **No error number displayed?** If you are having difficulty with the printer and no error number is displayed, refer to “General Problems” on page 7-2.

General Problems

Following are some printer problems that may not necessarily cause an error number to light up in the display window. Each problem description is followed by some suggestions for possible solutions:

Printer Will Not Power On

- Display window is blank.
 - Make sure the power cord is plugged in.
 - Verify that the power outlet current is “ON.”
 - Verify that the printer’s main power ON/OFF switch is “ON.”

Paper Does Not Advance

- Check paper path for foreign substances or objects.
- Paper is not properly loaded.
 - Check paper path and remove any damaged sheets.
 - Check tractors, paper alignment, and platen gap setting (page 3-17 to 3-24).
 - Inspect the paper tractor holes for damage or distortion (page 3-20).
 - Make sure paper is not hung up in the paper box (page 3-14).
 - Verify that the paper folds match the horizontal perforations (Figure 3-17).
 - Reload paper (page 3-10).

Paper Tearing or Separating on Multi-part Form

- Check forms position (page 3-17) and vertical paper tension (page 3-15).
- Make sure that the tractor control knob is in FORMS ALIGNMENT position when printing (Figure 3-20).
- Check paper for binding or dragging. Reload paper if necessary (pages 3-10 and 3-14).
- Verify that the paper tractor holes are not damaged or malformed (page 3-20).
- Check the forms thickness adjustment to make sure it is correct for the loaded form (page 3-21).
- Reload another box of forms from a different lot number (page 3-10).

Print Quality Is Erratic, Very Light, or Smudged

- Check the Forms Thickness Adjustment (page 3-21).
- Replace the ribbon (page 3-5).
- Make sure the ribbon is installed correctly behind the paper shield (page 3-5).
- Check vertical paper tension (page 3-15).

The Printer Will Not Print

- Check the interface configuration to make sure it is configured correctly. Refer to your Interface manual for information.
- Make sure the printer is “on-line.”
- Check the interface cable for proper connections.
- Check system status and spoolers (if applicable).

Status Code 2

Status Code 2 displays after a paper jam is cleared or power is restored following a power failure. The printer is recovering your print job and readying itself to print at the point where the error occurred. **DO NOT DISTURB THE JOB OR PRINTER!** This process may take several minutes, depending on the size of the job and the current capacity of the computer. (This condition is only true when using an HP-IB interface on some systems.)

Character Scrunch

When the printed characters appear somewhat squatty or scrunched, it is referred to as “Character Scrunch” (Figure 7-1, A). Character scrunch signifies that the paper tension is too loose. Adjust the vertical paper tension lever towards the letter “N” one position at a time (refer to “Adjusting Vertical Paper Tension,” page 3-15) until all character rows have correctly formed characters (Figure 7-1, B). Run sub-test 9 (a pattern of upper case characters) by following the procedures on page 3-24, to verify overall print quality. Continue running sub-test 9 and adjusting the setting until the best print quality is obtained.

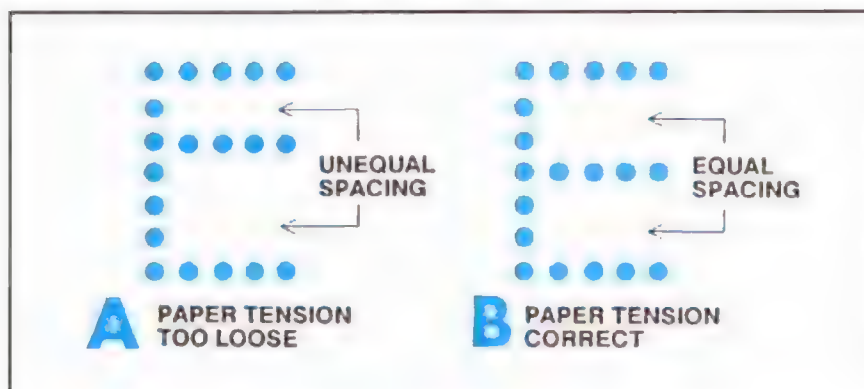


Figure 7-1. Character Scrunch

Note



Due to variations in paper and the mechanical tolerances of the printer, character scrunch of two dot rows or less is considered acceptable.

Printer Errors

All fault conditions are signified by flashing numbers in the display window on the Operator Control Panel. These error indications are provided to help you locate and possibly correct problems which prevent normal operation of the printer. When any fault condition exists, the printer automatically goes “off-line” and cannot be put “on-line” again until the fault is corrected.

Error numbers displayed on the HP2566C/HP2567C printer range from 10 through FF. There are several categories of errors:

- Operator correctable errors - error numbers 10, 11, 12 and 13.
- Run-time errors - error numbers 14 - 19 and 80 - 91.
- Self-test errors - error numbers 20 - 69.
- System protocol errors - error numbers C0 - CF*.
- Formatter errors - error numbers F0 - FF*.

*These alphanumeric (hexadecimal) error codes indicate possible system problems and should be referred to your Hewlett-Packard Service Representative.

Operator Correctable Errors

ERROR NO. 10: Swing-Gate Open

This error number indicates that the printer's swing-gate is not fully closed. Push the swing-gate handle down firmly to close.

ERROR NO. 11: Out of Paper

Error number 11 indicates that the printer is out of paper. A paper-out condition is detected in the lower left tractor due to the absence of paper. When paper-out is sensed, the printer finishes printing the current page, advances to the Top of Form, indicates error 11 (paper-out) and then goes "off-line" until paper is reloaded. This error clears when either the **ON LINE** or **SET T.O.F.** (and **ENTER**) key is pressed following paper reloading. No data is lost when paper-out occurs.

Note



If you set forms length in programmable VFC, make sure the same setting is entered in the front panel. Otherwise, **the printer will continue to print when paper out occurs.** This results in a loss of data. Refer to the *HP256X Technical Reference Manual, 02564-90905*, for more information on programmable VFC.

ERROR NO. 12: Ribbon Jam

This error number indicates the ribbon is jammed. See page 3-5 for information about proper installation of the ribbon. After the ribbon jam has been corrected, press **ON-LINE** to clear the error from the display.

ERROR NO. 13: Paper Jam

A paper jam error indicates that paper is not passing normally through the tractors. After the paper jam is corrected, press the **SET T.O.F.** key, align the new Top of Form with the appropriate label, and press **ENTER**. This procedure clears the error from the display and gets the printer ready so that it can be placed "on-line" and normal operation resumed. If you are using an HP-IB interface on an HP3000, the display may indicate number "2" and may take several minutes to recover after a paper jam. This is because the printer must recycle through the job until it reaches the point where the paper jam occurred. **DO NOT DISTURB THE JOB OR PRINTER!** The time required for this process varies with the size of the job and the computer system work load.

Non-Operator Correctable Errors

RUN-TIME ERRORS

Run-time errors can occur at any time when the printer is in normal operation (run-time errors do not include errors 10, 11, 12 or 13).

Table 7-1. Run-time Errors

Error #	Description
14	Print mechanism problem
15	Graphics run-time fail
16	Interface run-time fail
17	Printer time out
19	Remove CE strap*
80	Symbol set initialization problem
81-82	Slave self-test error
83	Internal firmware problem
86	Modem connect malfunction
90	Interface slave time-out
91	Graphics slave time-out

*Customer Engineer test mode

If you have run-time errors, write down the error number and its associated fail point as this helps identify the problem (see page 7-8 for fail point information). Check the paper path for binds and try to clear the error by powering off or re-setting the printer. If the error clears, perform a few line feeds and form feeds, check the forms thickness setting, and perform a self-test. If the self-test passes and print quality is acceptable, set the Top of Form and continue operation. Keep a record of the incident and monitor the printer for future occurrences. If the error does not clear, or reoccurs for unexplained reasons, contact your Hewlett-Packard Service Representative for assistance.

ERRORS NO. 14: FF

While in the TEST mode, any test error causes a flashing number to display in the display window. Errors 14 through 19 and 80 through FF can occur during normal print operations. Error numbers between 20 and 69 occur when the printer has failed its TEST routine.

Self-Test Failure

If a self-test routine fails, perform a reset (press the **FORM FEED** and **LPI ADJ.** keys simultaneously) and try the test again. If the test fails the second time, report the test error number and its associated "fail point" (see page 7-8) to your Hewlett-Packard Service Representative.

Note

Before calling, and before powering off the printer, record the error number and its associated fail point. Give these to the Hewlett-Packard Service Representative when you call.

Table 7-2. Self-Test Error Numbers

Error #	Description
*23	Ribbon test fail
*24	Velocity transducer adjust test fail
29	Configuration print out
30	Standard ripple print timeout
31	Double size ripple print timeout
32	Compressed ripple print timeout
33	High density ripple print timeout
34	Raster graphics timeout
36	Blackout print timeout
37	Print quality print timeout
38	Draft density ripple print timeout
39	900/1200 LPM upper-case ripple print timeout
40	Symbol set ROM CRC test fail
41	RAM test fail
42	ROM firmware test fail
43	Timer test fail
44	Dot Generation Logic test fail
*45	Too Many Dots test fail
*46	Corebar hammer test fail (hammers 1-99)
*47	Corebar hammer test fail (hammers 100-132)
*48	Enable linear motor test fail
49	Paper encoder failure
50-59	Interface errors installed
60-69	Graphics errors

*Customer Engineer test mode

Calling for Help

As previously mentioned, recurring printer error numbers 14 or greater should be reported to your Hewlett-Packard Service Representative. However, before calling, (and before powering-off the printer), record the error number and its associated fail point to give to the Service Representative when you call.

Finding the Fail Point

The fail point number is a sub-set of the error number. It helps the Service Representative pinpoint the problem with your printer. With this information, the Service Representative can partially diagnose the problem on the phone. If the printer fails the self-test two times in a row, or if a run-time error number is displayed, find the fail point number and record it before powering the printer off or calling your Service Representative. To find the fail point number, press and hold down the **ENTER** key. The number shows up in the display window while **ENTER** is depressed. A fail point number is required for error numbers 14 through 91, or letters C0 through FF.

PRINTER SPECIFICATIONS

Certification

The HP2566C/HP2567C line printer is listed by Underwriters Laboratories, Inc. in the following categories with respective guide designations: Electronic Data Processing Equipment (EMRT) and Office Appliances and Business Equipment (QAOT).

The HP2566C/HP2567C printer is certified to Canadian Standards Association (CSA) guidelines for data processing equipment.

This product is designed and tested to comply with IEC 950. Additionally, this printer is designed to meet European Safety and RFI/EMC standards for Electronic Data Processing Equipment. This includes Germany's VDE 0871 Level B. Any questions concerning regulatory compliance should be directed to your local Hewlett-Packard Sales Office.

Hiermit wird bescheinigt, daß das Gerät HP2566C/67C in Übereinstimmung mit den Bestimmungen der Postverfügung 1046/84 funkenstörtöist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

Wird das Gerät innerhalb einer Anlage zusammen mit anderen Geräten betrieben, so muß bei Inanspruchnahme der "Allgemeinen (Betriebs-) Genehmigung" nach der DBP-Verfügung 1046/48 die gesamte Anlage der Grenzwertklasse B nach DIN/VDE 0871/6.78 und den Auflagen nach ¶ 2 der DBP-Verfügung 1046/1984 entsprechen.

Printer Overview

The HP2566C/HP2567C printer uses dot-matrix technology which allows a high degree of printing flexibility. The basis of the printing mechanism in this printer is a print bar containing print hammers. The print bar oscillates horizontally to allow dot placement in any of the allowable dot positions across the page. Dot-matrix technology provides the flexibility to adjust character formation; allowing multiple languages, line draw characters, special characters and graphics images to be printed.

Dot-Matrix vs. Full-Font Printers

A major difference between dot-matrix printers and full-font printers is the print gap, or the distance between the print hammer in its retracted position and the platen. While the hammers of full-font printers fire only once to form an entire character, the hammer of a dot-matrix printer fires an average of 13 times and as many as 26 times to form a standard-density character. The high-repetition rates that dot-matrix hammers operate at in order to print at speeds comparable to full-font printers requires operation at a significantly smaller print gap. Figure A-1 gives a comparison of typical dot-matrix and full-font print gaps.

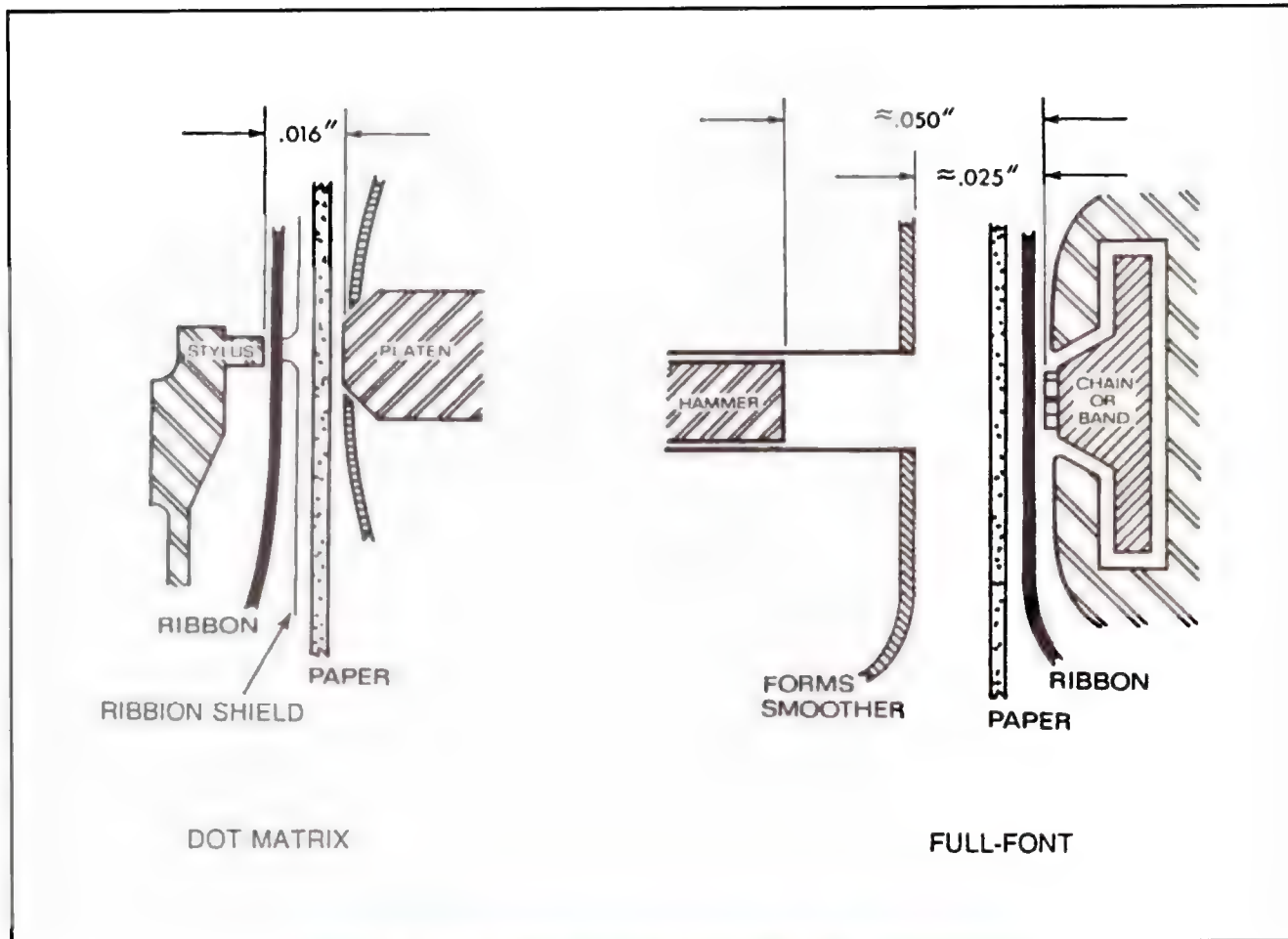


Figure A-1. Dot-Matrix and Full-Font Print Gap Comparison

For most standard paper and multi-part forms, the smaller print gap of dot-matrix printers does not present any problems. However, some specialty forms may cause unacceptable paper jam rates or print smearing even though they perform satisfactorily in full font printers. For a detailed discussion of the restrictions of specialty forms, refer to Appendix B, "Specialty Forms Specifications."

Physical Specifications

Without powered paper stacker

Including powered paper stacker

Width: 38.7 inches (98.3 cm)

Width: 38.7 inches (98.3 cm)

Depth: 25.0 inches (63.5 cm)

Depth: 41.5 inches (105.41 cm)

Height: 43.3 inches (110 cm)

Height: 43.3 inches (110 cm)

Weight: 465 pounds (211 kg)

Weight: 552 pounds (250 kg)

Electrical Characteristics

Input (VAC)

Frequency (Hz)

100 (+5%, -10%)

50/60 (+10%, -5%)

120 (+5%, -10%)

50/60 (+10%, -5%)

220 (+5%, -10%)

50/60 (+10%, -5%)

240 (+5%, -10%)

50/60 (+10%, -5%)

Power Cable Length

Two metres (approximately 6.5 feet)

Power Consumption

HP2566C

HP2567C

150 W non-printing

150 W non-printing

400 W printing (typical)

450 W printing (typical)

550 W printing (maximum)

650 W printing (maximum)

Power Dissipation	HP2566C	HP2567C
	512 BTU non-printing	512 BTU non-printing
	1365 BTU printing (typical)	1536 BTU printing (typical)
	1877 BTU printing (peak)	2219 BTU printing (peak)

Performance Specifications

These two tables specify the print speed and matrix sizes for the HP2566C/HP2567C printer.

Note



Print speed may vary with application and configuration. If you purchased a unique formatter your printer operating speeds will be different from the standard operating speeds listed in Table A-1 or A-2.

Table A-1. Print Speed and Matrix Sizes - HP2566C

Type of Print	Print Speed (lpm*)	Pitch (cpi*)	Matrix Size
High Speed Draft (upper case)	1200	10	4 x 5
High Speed Draft (lower case)	850	10	4 x 7
Normal (upper case)	900	10	5/13 x 7
Normal (lower case)	720	10	5/13 x 9
High Density (upper case)	248	10	7/19 x 14
High Density (lower case)	195	10	7/19 x 18
Compressed (upper case)	480	12	5/13 x 7
Compressed (upper case)	480	13.3	5/13 x 7
Compressed (upper case)	480	15	4/10 x 7
Compressed (upper case)	480	16.7	4/10 x 7
Compressed (lower case)	379	12	5/13 x 9
Compressed (lower case)	379	13.3	5/13 x 9
Compressed (lower case)	379	15	4/10 x 9
Compressed (lower case)	379	16.7	4/10 x 9
Double size (upper case)	240	5	14/38 x 14
Double size (lower case)	189	5	14/38 x 18
Bar Codes	50 ipm*		
Raster Graphics	50 ipm*		70 x 72
Raster Graphics (high density)	16.7 ipm*		140 x 144

*lpi - line-per-minute

*cpi - characters-per-inch

*ipm - inches-per-minute

Table A-2. Print Speed and Matrix Sizes - HP2567C

Type of Print	Print Speed (lpm*)	Pitch (cpi*)	Matrix Size
High Speed Draft (upper case)	1600	10	4 x 5
High Speed Draft (lower case)	1140	10	4 x 7
Normal (upper case)	1200	10	5/13 x 7
Normal (lower case)	960	10	5/13 x 9
High Density (upper case)	320	10	7/19 x 14
High Density (lower case)	252	10	7/19 x 18
Compressed (upper case)	600	12	5/13 x 7
Compressed (upper case)	600	13.3	5/13 x 7
Compressed (upper case)	600	15	4/10 x 7
Compressed (upper case)	600	16.7	4/10 x 7
Compressed (lower case)	480	12	5/13 x 9
Compressed (lower case)	480	13.3	5/13 x 9
Compressed (lower case)	480	15	4/10 x 9
Compressed (lower case)	480	16.7	4/10 x 9
Double size (upper case)	320	5	14/38 x 14
Double size (lower case)	252	5	14/38 x 18
Bar Codes	66.7 ipm*		
Raster Graphics	66.7 ipm*		70 x 72
Raster Graphics\ (high density)	22.2 ipm*		140 x 144

*lpm - lines-per-minute

*cpi - characters-per-inch

*ipm - inches-per-minute

Note

The printer regulates speed to keep internal temperatures at safe levels. This may affect throughput in warmer operating environments.

Dot Size 0.017 inch (.043 cm)

Dot Density

Table A-3. Dot Density

Dot Density	Description
High Speed Draft	110 dots/inch horizontal 56 dots/inch vertical
Normal	210 dots/inch horizontal 72 dots/inch vertical
High	210 dots/inch horizontal 144 dots/inch vertical
Compressed	12, 15 cpi = 180 dots/inch horizontal 13.3, 16.7 cpi = 200 dots/inch horizontal 72 dots/inch vertical
Graphics	60 or 70 dots/inch horizontal (low) 120 or 140 dots/inch horizontal (high) 72 or 144 dots/inch vertical
Bar Codes	110 dots/inch horizontal 144 dots/inch vertical

Paper Slew Rate 25 inches/second

**Multi-Part Forms
(carbon & carbonless)** 1 - 6 (.024 inches or .61 mm maximum pack thickness)

Vertical Forms Control 16 programmable channels

Environmental Specifications

Temperature

Operating: (printer and ribbon)	10° to 50° C (50° to 122° F)
Storage: (printer)	-40° to 75° C (-40° to 167° F)
Survival: (power-on)	-20° to 60° C (-4° to 140° F)
Storage: (ribbon)	10° to 50° C (50° to 122° F)

**Relative Humidity
(printer)**

Non-operating - 5% to 95% non-condensing

Operating - 20% to 80% (recommended)

**Audible Noise (printer
with powered paper
stacker attached)**

Declared noise emissions in accordance with ISO 9296:

HP2566C:

Printing

LWAd (Sound Power) = 7.5 bels

LpAm (Average Sound
Pressure at 4 bystander
positions = 58 db)

Idling

LWAd (Sound Power) = 6.7 bels

LpAm (Average Sound
Pressure at 4 bystander
positions = 50 db)

HP2567C:

Printing

LWAd (Sound Power) = 7.8 bels

LpAm (Average Sound
Pressure at 4 bystander
positions = 61 dB)

Idling

LWAd (Sound Power) = 6.6 bels

LpAm (Average Sound
Pressure at 4 bystander
positions = 48 dB)

PAPER SPECIFICATIONS

Certification

This section describes the paper specifications which must be met to ensure optimum performance of the HP2566C/HP2567C printer.

Hewlett-Packard conforms to ANSI standard X3.96-1983, "American National Forms Information Systems for Continuous Business Forms," and ISO Recommendation No. 2784, which cover common form widths and depths, standards for sprocket feed holes and margins, as well as other basic tolerances.

All measurements should be made at 20° to 26° C (68° to 78° F) and 45% to 50% relative humidity.

The printer uses continuous fan-fold edge-perforated paper varying in width from 3 inches (7.6 mm) to 18 inches (45.72 cm). Although the printer accepts paper as wide as 18 inches, the farthest right it can print is 15.2 inches (38.6 cm).

Standard Forms Specifications

Paper Sizes	Maximum form width:	18 inches (45.72 cm) edge-to-edge
	Minimum form width:	3 inches (7.62 cm) edge-to-edge
	Maximum left margin:	2 inches (5.08 cm)
	Maximum right margin:	2.8 inches (7.11 cm)
	Maximum printing width:	13.2 inches (33.53 cm)
	Maximum form length:	16 inches (40.64 cm)
	Minimum form length:	2 inches (5.08 cm)

Paper Weights

Single part:

15 - 100 pound (57 - 380 gm/sq meter)

Multipart:

Paper: 12 pound (46 gm/sq. meter) up to 6 total pages

Carbons: 8 pound (30 gm/sq. meter) up to 6 total pages

Pack Thickness: Maximum .024 inches (.61 mm) total

Carbonless Multi-Part: Up to 4 part forms

Due to variations in the manufacturing processes, quality and composition of paper, Hewlett-Packard cannot guarantee satisfactory performance with all papers and forms. Special paper, including multi-part forms, carbonless forms, card stock, and labels should be tested for satisfactory feeding, registration and print quality prior to purchase. The forms used in the printer should not vary in thickness across the printable surface. If paper is to be used in humidity extremes (greater than 80% or less than 20%) it should first be tested. Paper to be used at high humidity should be thoroughly tested for satisfactory feeding and handling. Paper to be used at low humidity should be tested to determine if static buildup must be eliminated for proper stacking.

Specialty Forms Specifications

This section of paper specifications is intended to familiarize and alert the user to some of the characteristics of specialty forms which may cause unsatisfactory performance of the printer. **This paper specification is NOT intended as a substitute for actual testing.**

Note



All specialty forms, including special single-part paper, multi-part forms, forms with glue strips, carbonless forms, card stock, and labels should be tested for satisfactory feeding, registration, and print quality prior to purchase.

Form Thickness Uniformity

Because of the small print gap in dot-matrix printers, these printers are less tolerant of form thickness variations than are full-font printers. Sometimes these thickness variations can be caused by defects such as bubbles or wrinkles. Other times they are due to varying paper composition or the number of parts within the form.

Nominal differences in thickness and compressibility make it impossible to specify allowable thickness variations exactly. The following cases are intended to serve as a guide, but all forms with thickness variations must be tested for satisfactory performance.

Case 1: Form Defect

In order to avoid hammer dragging, the overall thickness of a form plus any defects should be no more than as shown in Figure B-1 ($.015 + T/2$; T=thickness) inch.

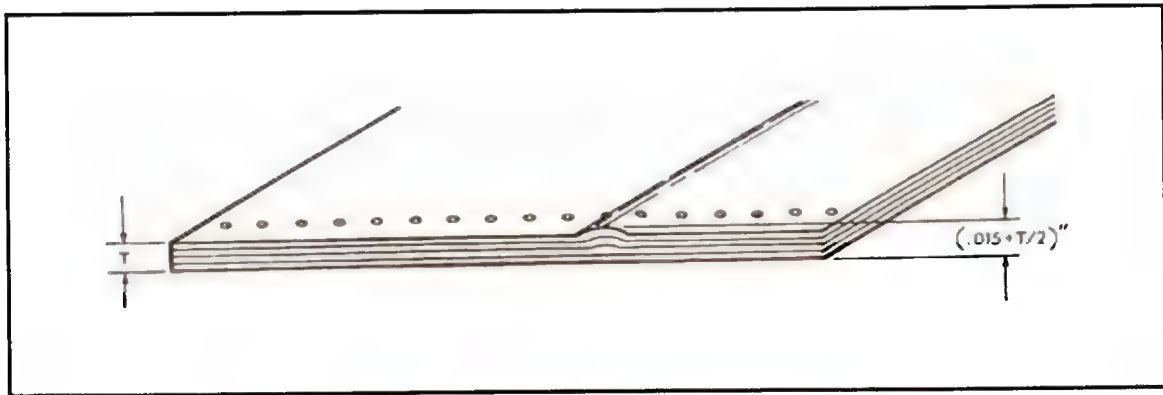


Figure B-1. Maximum Height of Form Defects

Case 2: Varying Thickness Forms: Printing on All Areas.

In order to ensure satisfactory print quality on all areas of the form, the difference in thickness between the thickest and thinnest section of the form should be no more than .008 inch (as shown in Figure B-2). The print gap should be adjusted to optimize print quality on all thicknesses of the form.

Since dot-matrix printing is optimized when printing at one gap size, print quality can, in some cases, be compromised when printing on forms of varying thickness. This is especially true on the copy sheets of multi-part forms. When printing on forms of varying thickness, the maximum depth of depression defects on the thick part of the form is also .008 inch.

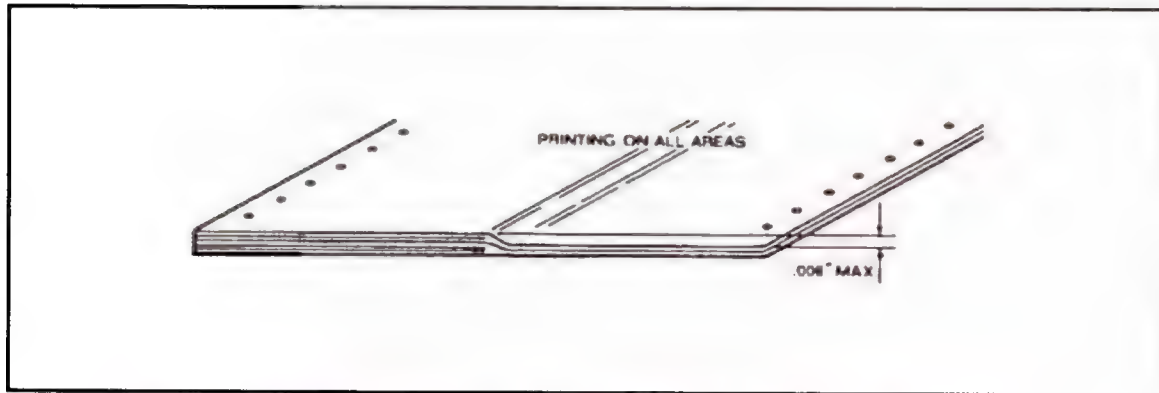


Figure B-2. Maximum Thickness Variation for All Areas of a Special Form

Case 3: Varying Thickness Forms: Printing on Thin Areas

In order to avoid smearing on the thickest area of the form when printing on the thin area only, the difference in thickness between the thinnest area and the thickest should be no more than as shown in Figure B-3 ($.015 - T/2$; T =thickness) inch. For forms with larger variations in thickness, the print gap may be opened beyond the optimum gap to reduce smearing, but print quality on the thinner areas will degrade accordingly.

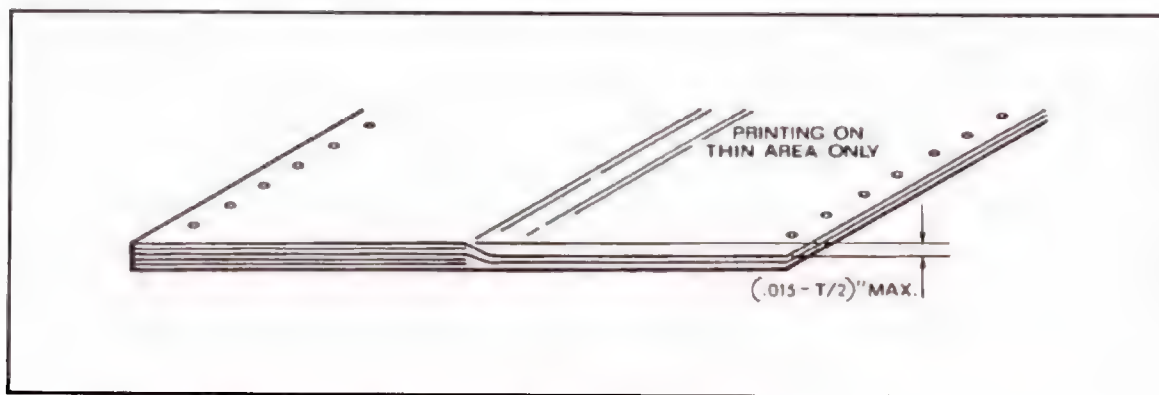


Figure B-3. Maximum Thickness Variation for the Thin Areas of a Special Form

Case 4: Varying Thickness Forms: Printing on Thickest Areas

In this case, as long as the thickest area of a form does not exceed the specifications listed (see "Paper Weights" page B-2), there is no lower limit to the thickness of the thinnest area as long as it is sufficient to support the form as it is fed through the printer.

Perforation Projection

The perforation projection (perforation tent) is measured by laying the form on a flat surface as shown in Figure B-4. Perforation projections exceeding the value shown $(.015 + T/2)$ inch, can result in excessive smearing at the perforations and/or an unacceptable jam rate. This is because the perforations may snag on the hammers as they are slewed through the print area. Opening the print gap will reduce smearing or jamming, but it may also degrade print quality.

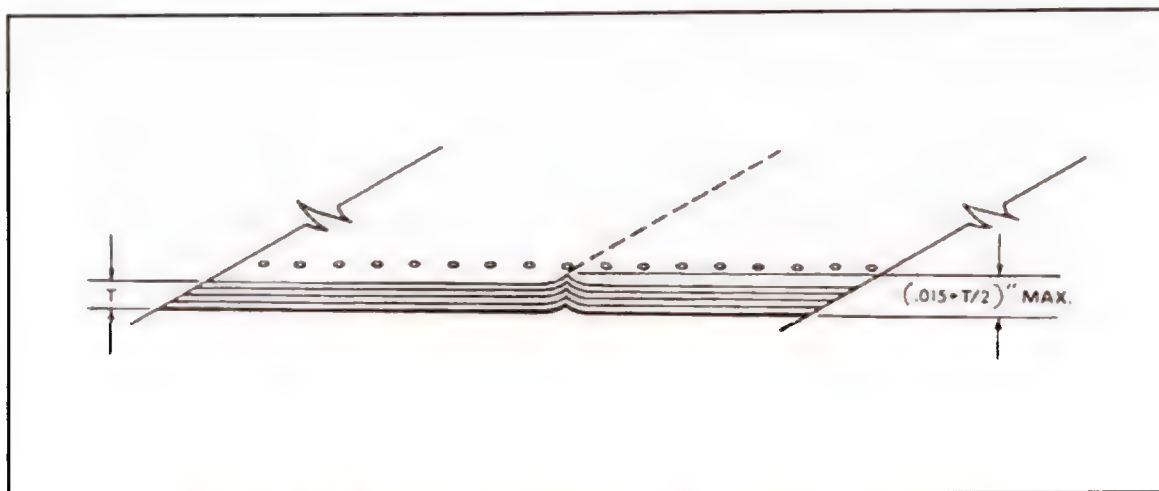


Figure B-4. Maximum Allowable Form Perforation Projection

Other Special Forms

Forms with windows, cutouts, flaps, attached cards, and other specialized items may jam excessively in the printer. The only way to make sure they can be used in the printer is to test them thoroughly for optimum printing performance before purchase.

Labels Most standard labels work well in the printer as long as they meet the specifications outlined in the section. Due to variations in the label products offered, however, all labels should be tested for satisfactory performance before purchase.

Conclusion Since it is impossible to test all form types available for use in the printer, Hewlett-Packard recommends that paper conform to the specifications outlined in this document for optimum printer performance.

Once again, this paper specification is NOT intended as a substitute for actual testing. ALL SPECIALTY FORMS, INCLUDING SPECIAL SINGLE-PART PAPER, MULTI-PART FORMS, FORMS WITH GLUE STRIPS, CARBONLESS FORMS, CARD STOCK, AND LABELS SHOULD BE TESTED FOR SATISFACTORY FEEDING, AND PRINT QUALITY PRIOR TO PURCHASE. For best results in selecting standard or specialty forms, consult a forms vendor who can ensure conformance to these specifications and recommend cost-effective purchases.

RIBBON SPECIFICATIONS

Appendix C describes the ribbon specifications which must be met to ensure optimum performance of the HP2566C/HP2567C printer.

Overall Dimensions	Overall Ribbon Length:	60 ± 0.5 feet (18.3 ± .15 metres) and full-font
	Ribbon Width:	15.2 inches (386 mm)
	Core Length:	16 inches (406 mm)
	Core I.D.:	1.250 inches (31.8 mm)

Ribbon Fabric The ribbon should be .0036 to .0042 inch (.0914 to .1067 mm) thick nylon fabric. Quality ribbon fabric should have 716 to 742 threads per in² (111 to 115 threads per cm²).

Only new ribbon fabrics are recommended for use in the HP256X printers. Current methods used for re-inking used ribbons do not ensure complete re-saturation of the ribbon. Excess ink on the surface of the ribbon tends to come off the ribbon in clumps and contributes to print bar contamination. Ink build up on the hammers can cause them to fire incorrectly.

Splices or repair patches in the body of the ribbon material between conductive pads should also be avoided.

Ink	Ink specifications include:	
	Color:	Medium black
	Pigmentation size:	<5 microns
	Solids content:	20%
	Ribbon ink content:	18-20% by weight
	Ink base:	Vegetable oil

Conclusion Since it is impossible to test all ribbons available for use in the printer, Hewlett-Packard recommends that ribbons conform to the specifications outlined in this document for optimum printer performance. The part number for the recommended ribbon for the HP2566C/HP2567C printer is 9282-0545A.

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